

POLLUTION CONTROL BRANCH

CA20N

EU

1976

C551

[n75?]

APPENDIX I

COMMUNITY NOISE LEVEL DATA OF KINGSTON

RECEIVED

OCT 12 1976

PRINTING SERVICES BRANCH
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Ontario

Ministry
of the
Environment

The Honourable
William G. Newman,
Minister

Everett Biggs,
Deputy Minister

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1976
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APPENDIX I

COMMUNITY NOISE LEVEL DATA

of

KINGSTON

by

A. K. DIXIT

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Community Noise Monitoring Sites inKingston

<u>Site Number</u>	<u>Location</u>	<u>Page</u>
01	19 Montgomery Boulevard	12
03	St. Lawrence College	20
04	Robert Wallace Drive at McKenzie Crescent	28
05	Lake Ontario Park	36
06	35 Morenz Crescent	44
07	147 Churchill Crescent	48
08	18 Wellington Street	54
09	235 Avenue Road	62
10	154 Hillendale Avenue	70
11	95 Michael Grass Crescent	78
12	Napier Street at Mack Street	86
13	262 Princess Street	92
14	Place D'Armes at Wellington	100
15	24 Stuart Street	108
16	Bayswater Place	116
17	Kingston Shopping Centre	124
18	Frontenac Mall	132
19	297 Yonge Street	140
20	Elmwood Street, off Sir John A. MacDonald Boulevard	148
21	307 Weller Avenue	156
22	30 Hickson Avenue	158
23	23 Smith Street	166
24	25 Barbara Avenue	174

25	15 Prime Street	176
26	Concession Street near Traffic Circle	178
27	280 Albert Street	180
31	University Avenue near Union Street	182
32	15 James Street	190

DEPARTMENT OF THE ENVIRONMENT, ATMOSPHERIC ENVIRONMENT SERVICE-DAILY CLIMATOLOGICAL SUMMARY

LISTING NUMBER
6104146 609

TIME ZONE
E

IDENT.

LATITUDE

LONGITUDE

ELEVATION (FT.)

295 KINGSTON A

STATION NAME

ONT

LISTING NUMBER	DATE			TEMPERATURE °F.			DEGREE DAYS BELOW 65°F.	RELATIVE HUMIDITY		PRECIPITATION								SHOW DEPTH 1200 Z	DAYS WITH												PEAK WIND			
														(INCHES)																				
	YEAR	MO.	DAY	MAXIMUM	MINIMUM	MEAN		MAX	MIN	6 - HOURLY TOTAL AMOUNTS				24 - HOURLY TOTALS					FREEZING TEMP.	THUNDER	STORMS	RAIN OR DRIZZLE	FREEZING PRECIP.	HAIL	SNOW	WINDS PRECIP.	FOG	SMOKE OR HAZE	DUST OR BR	BLowing SNOW	WIND SPEED		DIR.	SPD
										1200 Z	1800 Z	0000 Z	0600 Z	RAINFALL	SNOWFALL	TOTAL PRECIP.	7 22 MPH														7 39 MPH			
6104146	73	06	01	68	49	59	6	94	62		T			17			17			17	0		1	1				1					78	30
6104146	73	06	02	57	42	50	15	98	58												0													
6104146	73	06	03	68	42	55	10	98	37					03		03				03	0		1											
6104146	73	06	04	74	56	65		100	75		03			T		03				03	0		1				1							
6104146	73	06	05	70	56	63	2	100	77					22		22				22	0		1	1			1		1			55	22	
6104146	73	06	06	76	59	68		100	66		05			T	49	54			54	0		1	1			1		1						
6104146	73	06	07	68	58	63	2	100	77		08					08				08	0			1			1	1						
6104146	73	06	08	75	59	67		88	61												0											66	25	
6104146	73	06	09	81	59	70		92	39		T		T				T			T	0								1			76	31	
6104146	73	06	10	65	54	60	5	91	70												0													
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6104146	73	06	12	76	60	68		98	82				50		T		50			50	0		1	1								77	24	
6104146	73	06	13	75	61	68		94	56					04		04				04	0			1										
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6104146	73	06	18	59	56	58	7	100	76		05			01		T	06			06	0			1								54	35	
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6104146	73	06	20	74	62	68		94	75												0													
6104146	73	06	21	71	61	66		100	92												0													
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6104146	73	06	23	69	61	65		98	80												0													
6104146	73	06	24	69	60	65		95	75												0													
6104146	73	06	25	69	55	62	3	95	63												0											55	21	
6104146	73	06	26	76	54	65		93	75												0													
6104146	73	06	27	75	67	71		90	74												0													
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6104146	73	06	29	74	64	69		98	67		27				19	46			46	0		1	1			1		1				54	32	
6104146	73	06	30	74	63	69		98	65												0													
TOTALS				2127	1690											2	29	0	2	29		612				12	217							
MEAN				709	563	636																												
EXTREMES				81	42											54	0	54																35
DEGREE DAYS						7		81			954	714	654	414		DIFFERENCE FROM NORMAL																		
WITH TEMPERATURE BASE (FAHRENHEIT)				BELOW 32°	BELOW 55°		BELOW 65°			ABOVE 32°	ABOVE 40°	ABOVE 42°	ABOVE 50°		FOR																			

ONT

148 41 K1x 148 02

DEPARTMENT OF THE ENVIRONMENT, ATMOSPHERIC ENVIRONMENT SERVICE-DAILY CLIMATOLOGICAL SUMMARY

LISTING NUMBER
6104146 609

TIME ZONE
E

IDENT.

LATITUDE

LONGITUDE

ELEVATION (FT.)

STATION NAME

295 KINGSTON A

ONT

[illegible]

99 MO 21814 04 66

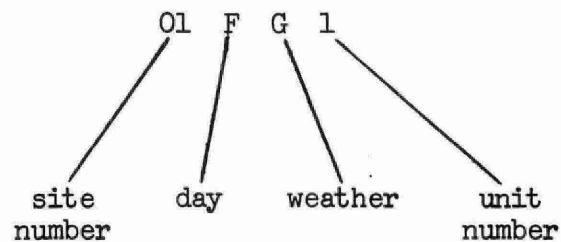
Continuous Traffic Counts and Corresponding Noise Levels in Kingston

LOCATION	DAY	DAYTIME				EVENING				NIGHT			
		TRAF. COUNT	L 10	L 50	L 90	TRAF. COUNT	L 10	L 50	L 90	TRAF. COUNT	L 10	L 50	L 90
BATH ROAD at CITY LIMITS 16	FRIDAY	20436	55	50	45	6234	54	49	45	1660	52	45	39
	SATURDAY	17314	58	52	46	4500	59	53	48	1435	53	47	43
	SUNDAY	7513	54	48	43	2706	55	49	44	1130	51	46	41
	MONDAY	16007	58	51	45	3143	56	51	45	1281	52	46	41
PRINCESS STREET at SHOPPING CENTRE 17	FRIDAY	10771	64	58	52	2935	63	56	50	1090	57	53	48
	SATURDAY	8805	62	56	47	2060	59	54	48	1008	56	50	45
	SUNDAY	6074	60	53	46	1581	60	53	47	678	55	51	46
	MONDAY	11318	62	56	49	2048	61	54	48	749	55	49	45
BATH ROAD at FRONTENAC MALL 18	FRIDAY	16800				5110				1360			
	SATURDAY	14040	64	56	46	3910	61	53	47	1630	52	47	43
	SUNDAY	8300	60	52	46	2870	56	52	47	1170	55	51	46
	MONDAY	17470	64	56	50	5320	61	54	49	1300	54	50	47
SIR J.A. MacDONALD near ELMWOOD 20	FRIDAY	9242				2129				845			
	SATURDAY	5869	56	51	47	1124	54	50	46	684	52	49	46
	SUNDAY	4849	57	50	46	1671	55	50	47	591	52	49	46
	MONDAY	8573	60	51	47	1384	55	49	46	659	51	48	44
MONTREAL STREET at HICKSON ROAD 22	FRIDAY	5516	60	48	41	1273	53	45	41	731	49	44	40
	SATURDAY	4157	57	49	45	923	53	48	43	538	51	47	43
	SUNDAY	3774	56	48	43	944	54	48	44	459	50	47	43
	MONDAY	4669	63	48	39	956	56	48	39	414	52	43	36
DIVISION STREET at BARBARA AVENUE 24	FRIDAY												
	SATURDAY												
	SUNDAY												
	WEDNESDAY	10682	50	49	41	2352	56	48	40	1197	54	46	39
CONCESSION STREET near TRAFFIC CIRCLE 26	FRIDAY												
	SATURDAY												
	TUESDAY	10533	73	67	60	2288	71	64	55	701	67	54	49
	WEDNESDAY	9698				2132				690			

LOCATION	DAY	DAYTIME				EVENING				NIGHT			
		TRAF. COUNT	L 10	L 50	L 90	TRAF. COUNT	L 10	L 50	L 90	TRAF. COUNT	L 10	L 50	L 90
JOHNSON STREET near YONGE STREET	FRIDAY												
	SATURDAY												
	SUNDAY												
	26 THURSDAY	7482	66	55	48	1945	62	51	45	630	55	48	44
PORTSMOUTH AVENUE	FRIDAY	4601				1468				607			
	SATURDAY	3911	55	47	42	1081	54	47	43	530	52	47	43
	SUNDAY	3908	52	46	41	1151	54	46	41	348	50	45	40
	10 MONDAY	4872	59	49	42	1155	51	45	40	324	50	43	35
	FRIDAY												
	SATURDAY												
	SUNDAY												
	MONDAY												
	FRIDAY												
	SATURDAY												
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	MONDAY												
	FRIDAY												
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	MONDAY												
	FRIDAY												
	SATURDAY												
	SUNDAY												
	MONDAY												

TERMINOLOGY USED
on
COMPUTER PRINT-OUTS

Code: EXAMPLE



Day Codes:

F - Friday
A - Saturday
U - Sunday
M - Monday
T - Tuesday
W - Wednesday
H - Thursday

Weather Codes:

W - Windy
G - Good Weather
R - Rainy

Unit Numbers:

01 & 02 in North Bay
03 & 04 in Kingston

05 & 06 in Sault Ste. Marie
(sometimes 01 & 02 also)

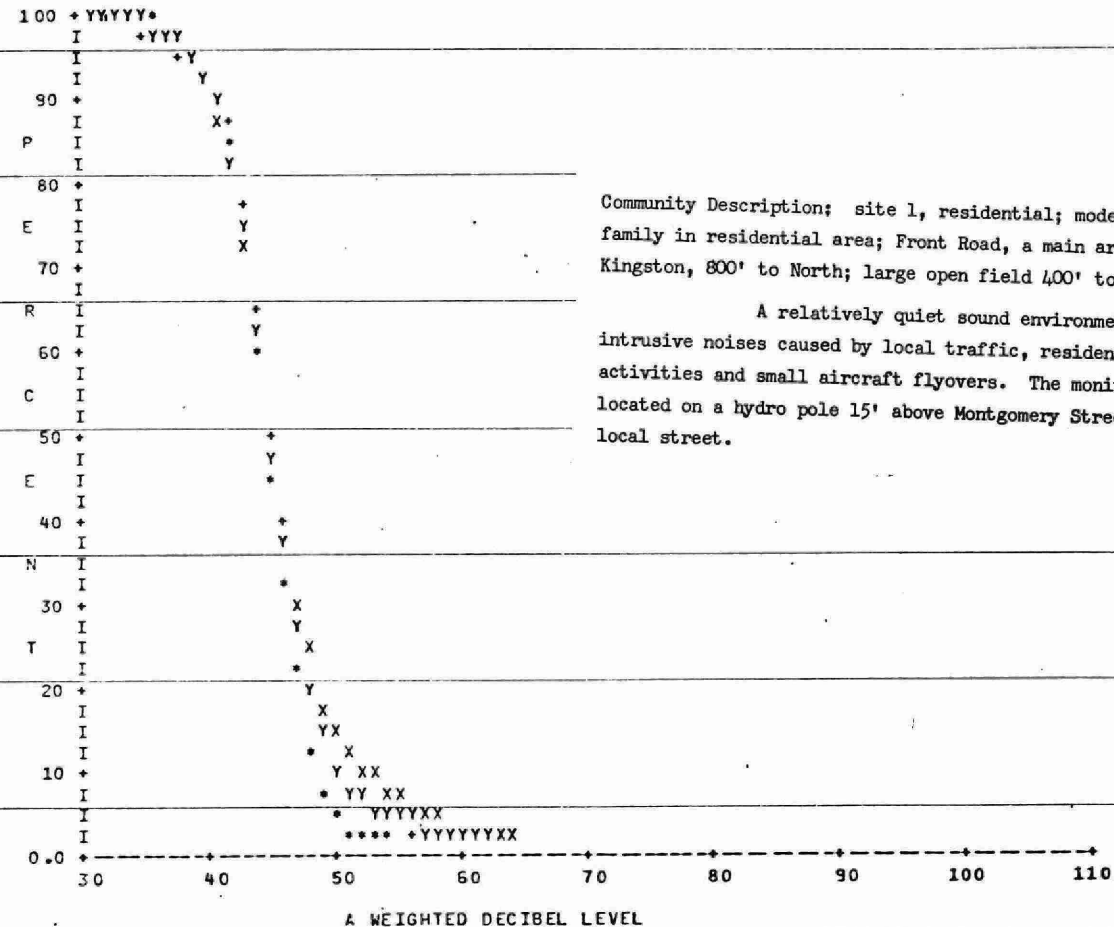
The example of the use of the above code together with the legend used in the computer print-out graphs is shown on page 10 and 11

DATE AND LOCATION CODE 01FG3

10

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 01F63



Community Description: site 1, residential; modern single family in residential area; Front Road, a main artery into Kingston, 800' to North; large open field 400' to East.

A relatively quiet sound environment, intrusive noises caused by local traffic, residential activities and small aircraft flyovers. The monitor was located on a hydro pole 15' above Montgomery Street, a local street.

KEY:

* - 11p.m. - 7a.m.

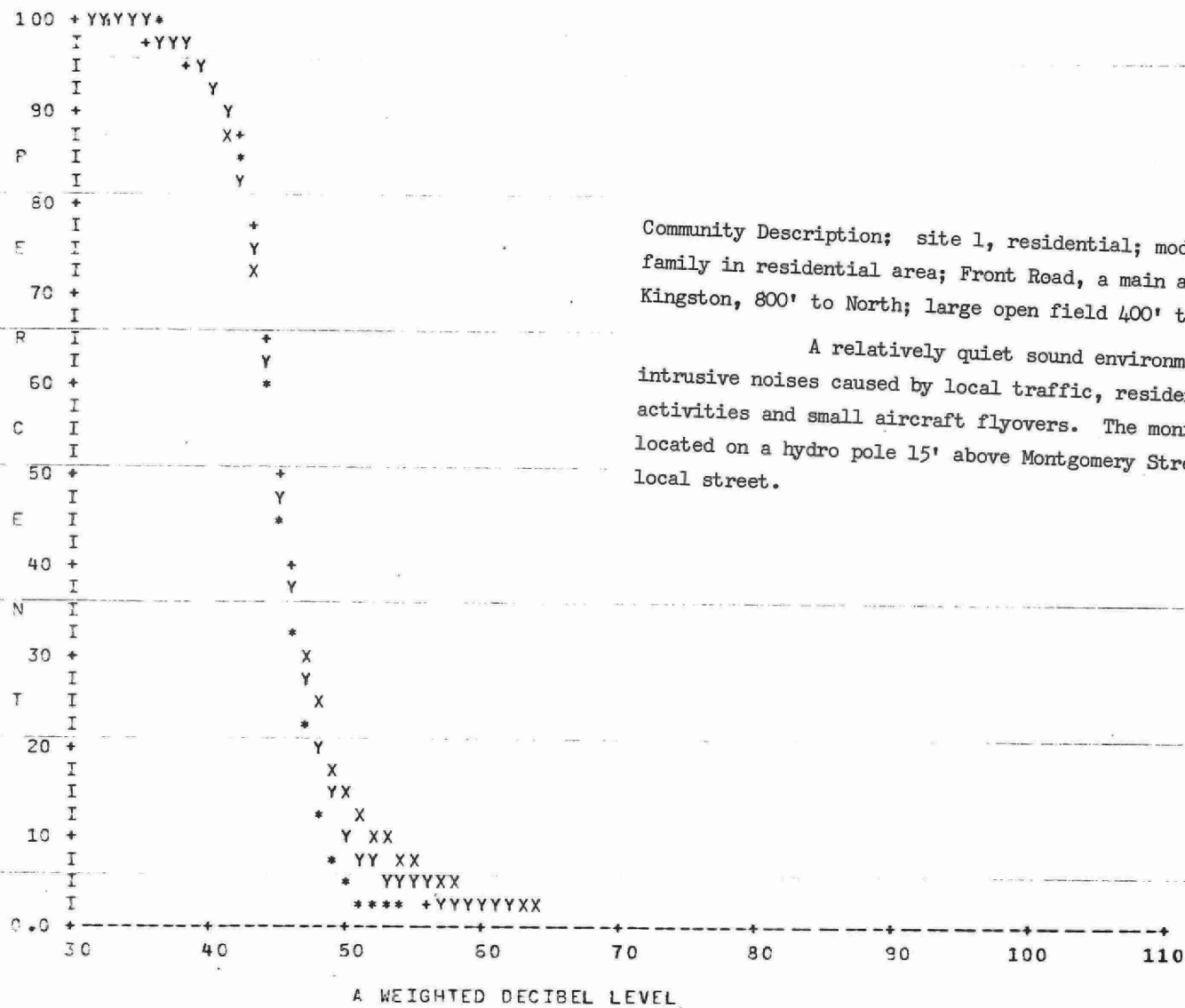
+ - 7p.m. - 11p.m.

x - 7a.m. - 7p.m.

y - 24 hour

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 01F63

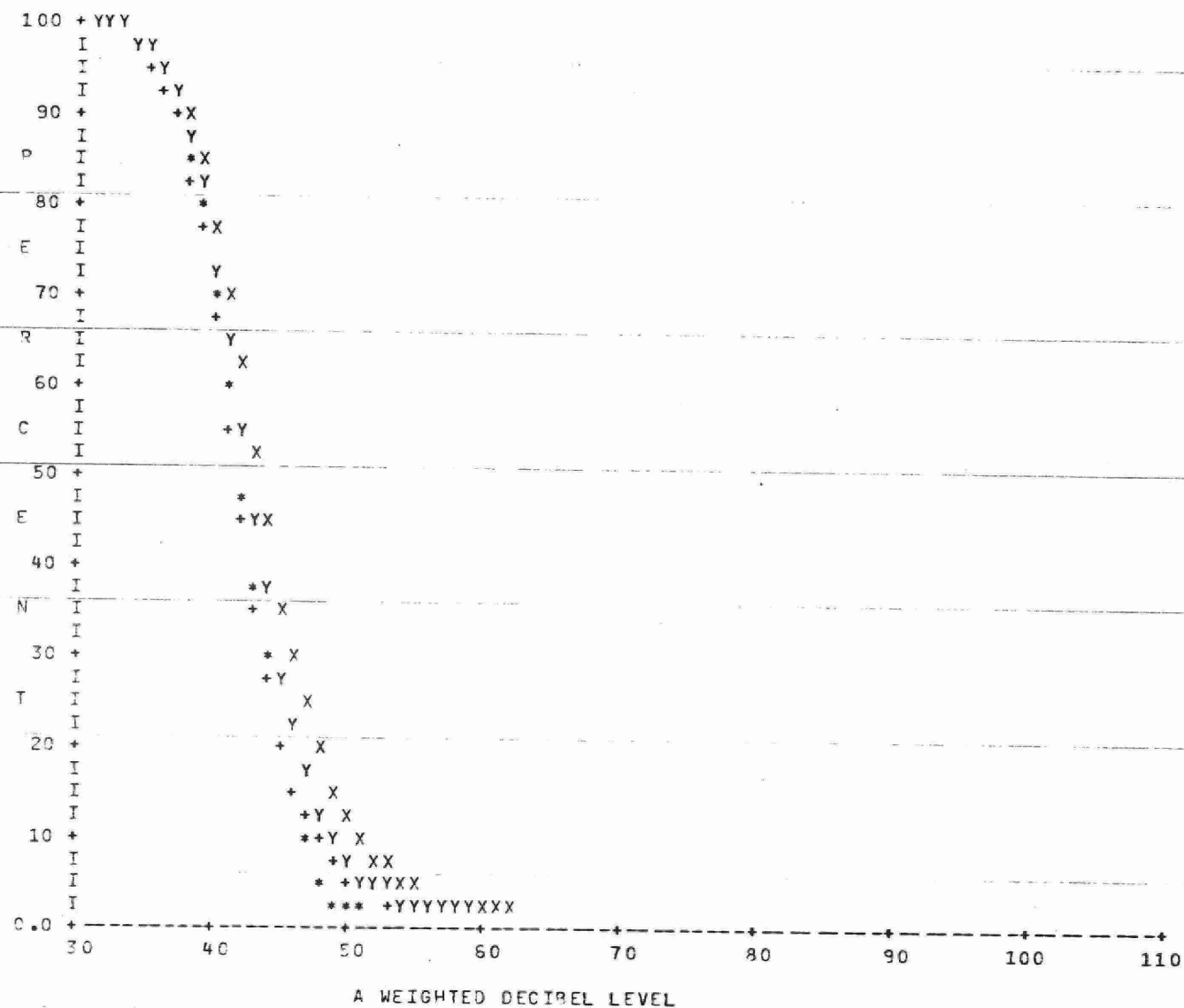


DATE AND LOCATION CODE 01AG3

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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
 DATE AND LOCATION CODE 01AG3

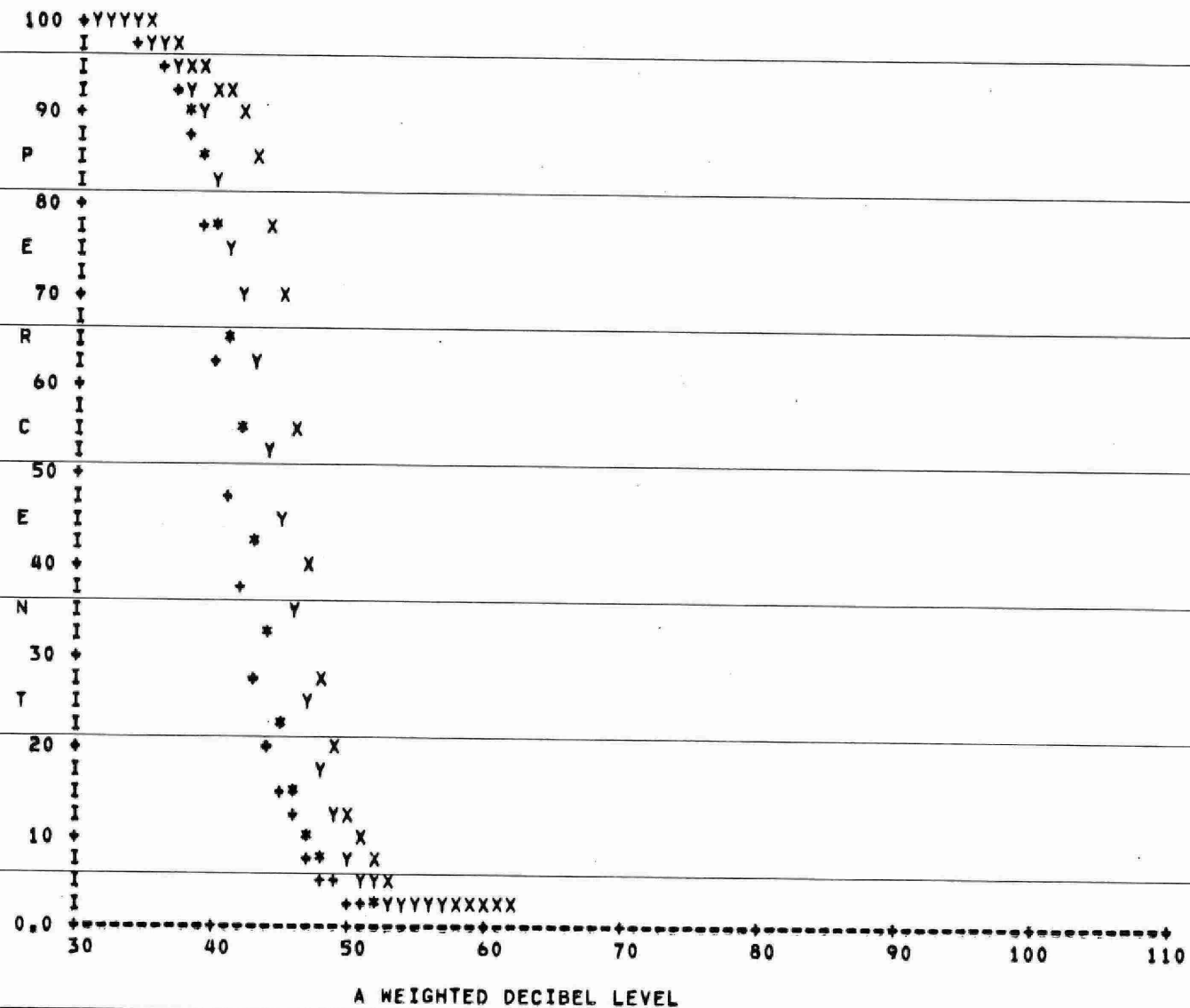


24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE	01 UG3	PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{BQ}	SIGMA	NPL
110 +		11p.m.-7a.m.	58	48	43	39	44.5	48.8	4.2	59.6
100 +		7a.m.-7p.m.	66	51	47	43	44.5	55.6	4.7	67.5
90 +		7p.m.-11p.m.	52	47	41	38	43.5	44.0	3.7	53.3
80 +		24 hour	61	50	45	39	52.5	53.2	4.9	65.7
70 +										
60 +										
50 +										
40 +										
30 +										
DBA										
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22										
23										
24										

HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
DATE AND LOCATION CODE 01UG3



01M63

 L_1
$$L_{10}$$
L₅₀ L_{90}

TNI

 L_{EQ}

SIGMA

NPL

110 +

100 +

90 +

80 +

DBA I

70 +

60 +

50 +

40 +

30 +

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

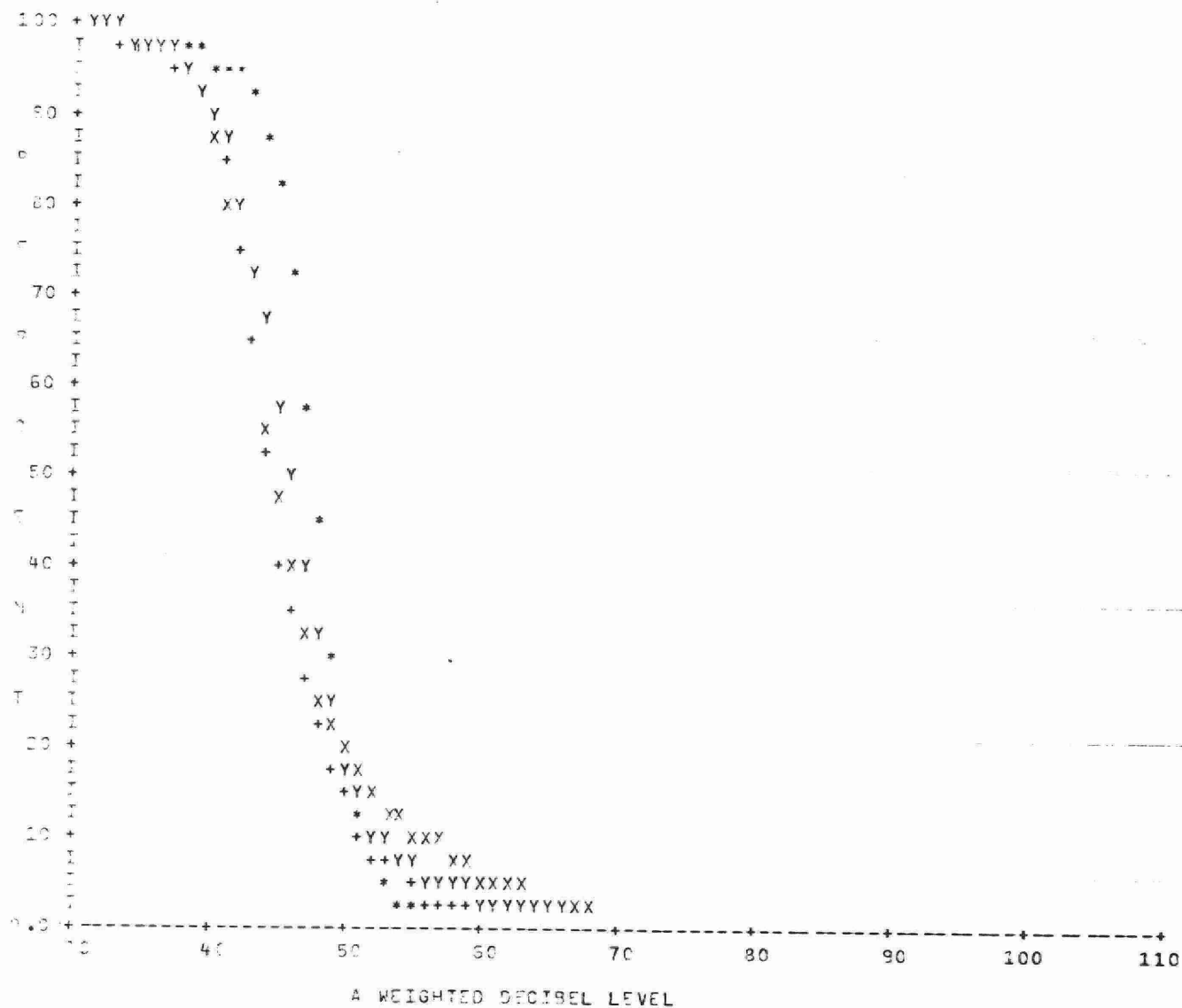
AM PM

HOUR OF DAY

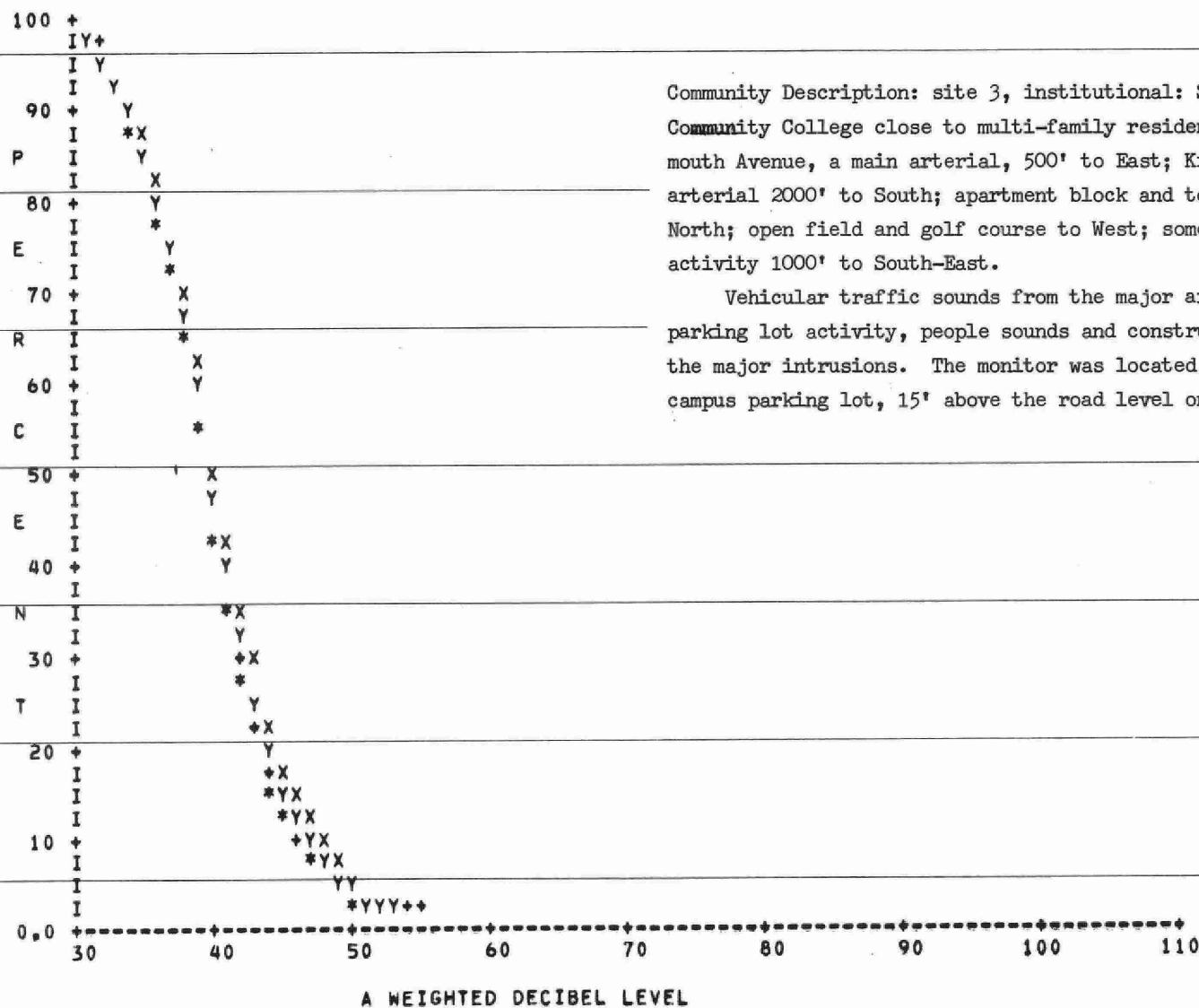
18

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 01MG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
DATE AND LOCATION CODE 03AG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

03JUN4

PERIOD

L₁

L₁₀

L₅₀

L₉₀

TNI

L_{EQ}

SIGMA

NPL

110 +

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100 +

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11p.m.-7a.m.

58

52

45

40

57.5

48.5

4.6

60.2

7a.m.-7p.m.

63

54

47

41

62.5

52.8

5.2

66.2

7p.m.-11p.m.

67

54

46

40

65.5

59.8

5.8

74.6

24 hour

61

53

46

40

61.5

54.4

5.2

67.6

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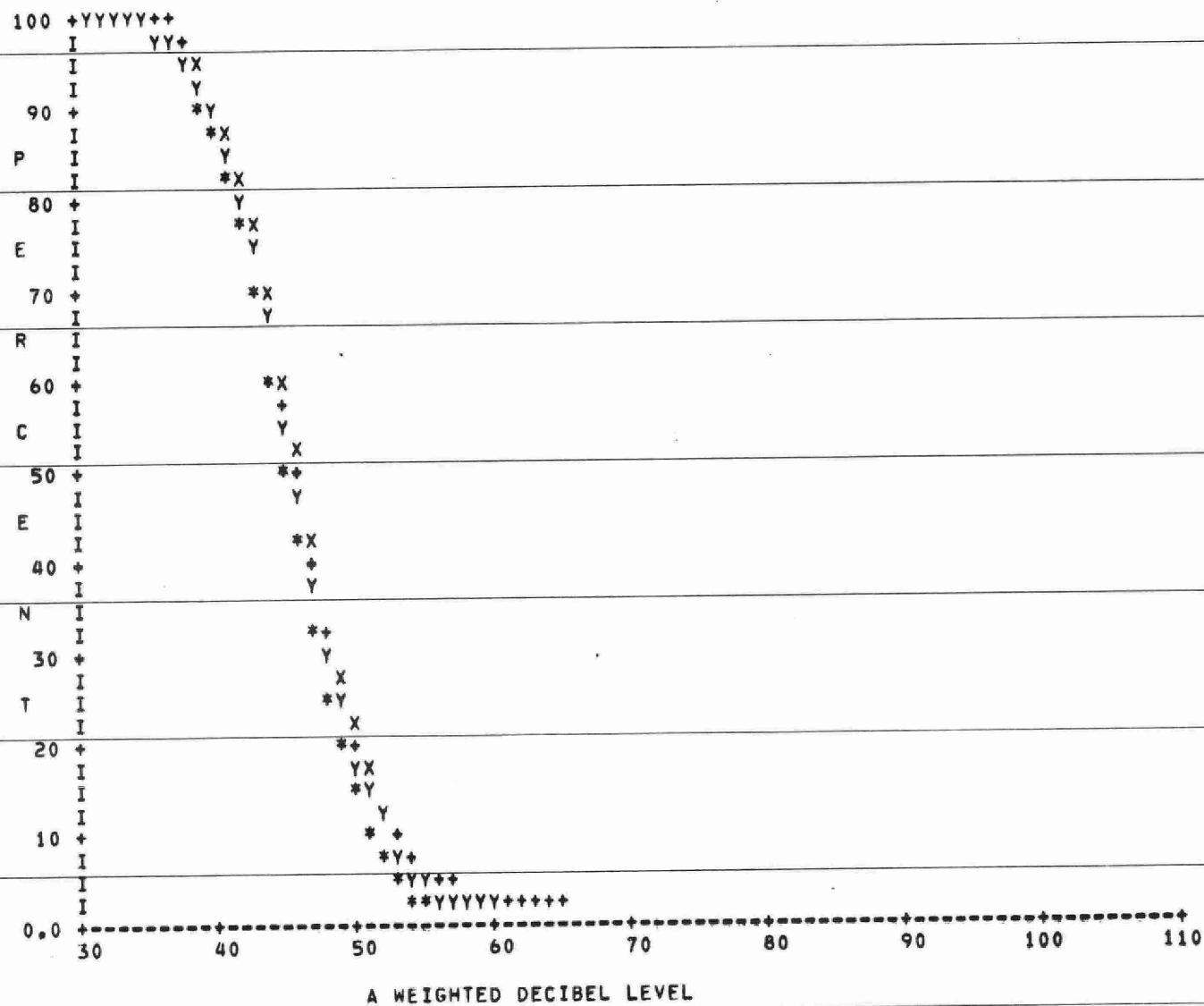
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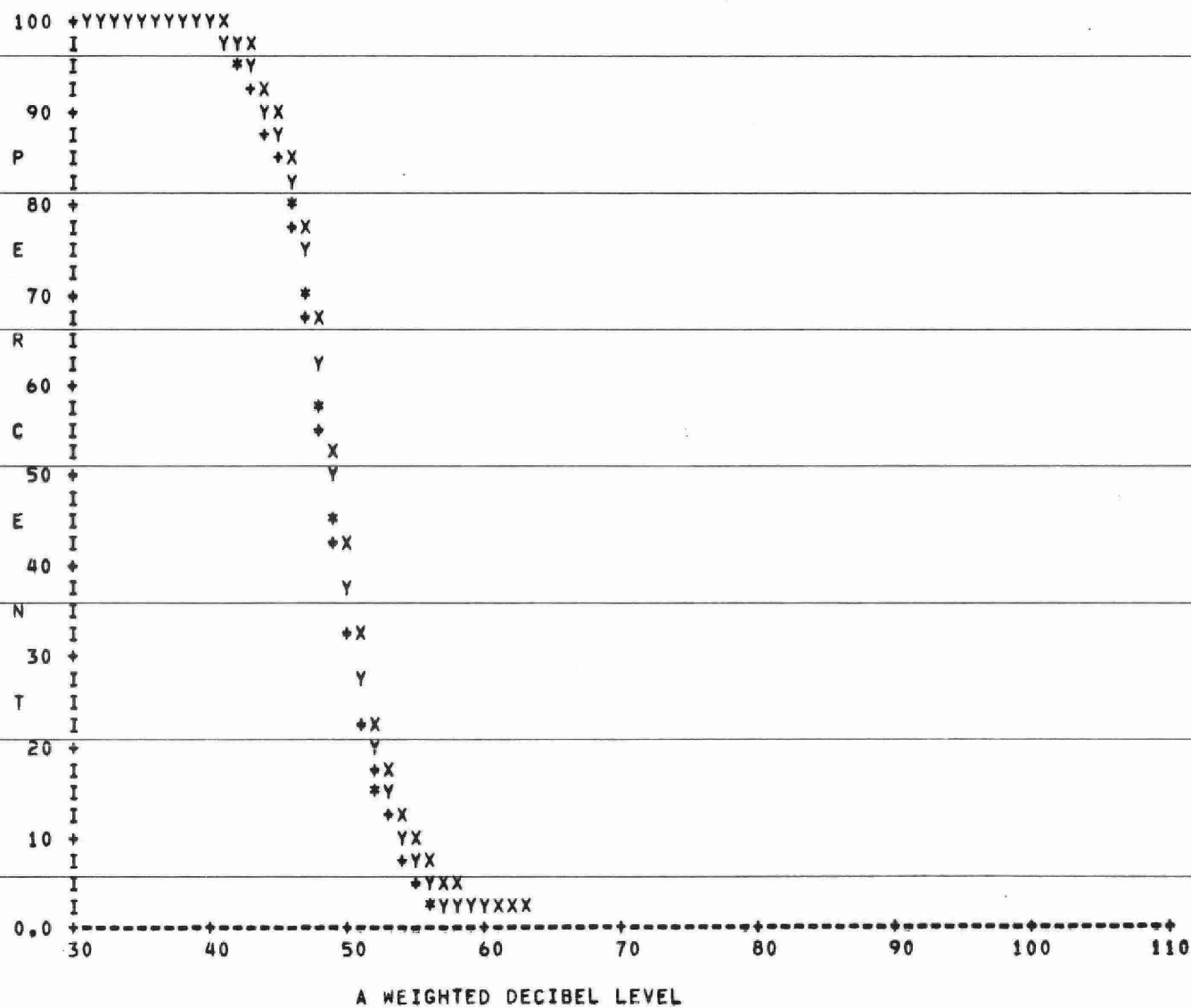
HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
 DATE AND LOCATION CODE 03UW4



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 03MG4



DATE AND LOCATION CODE

03TG4

PERIOD

$$I_1$$
 L_{10} L₅₀L₉₀

TNI

 L_{EQ}

SIGMA

NPL

110 +

100 +

90 +

80 +

DBA I

70 +

60 +

50 +

40 +

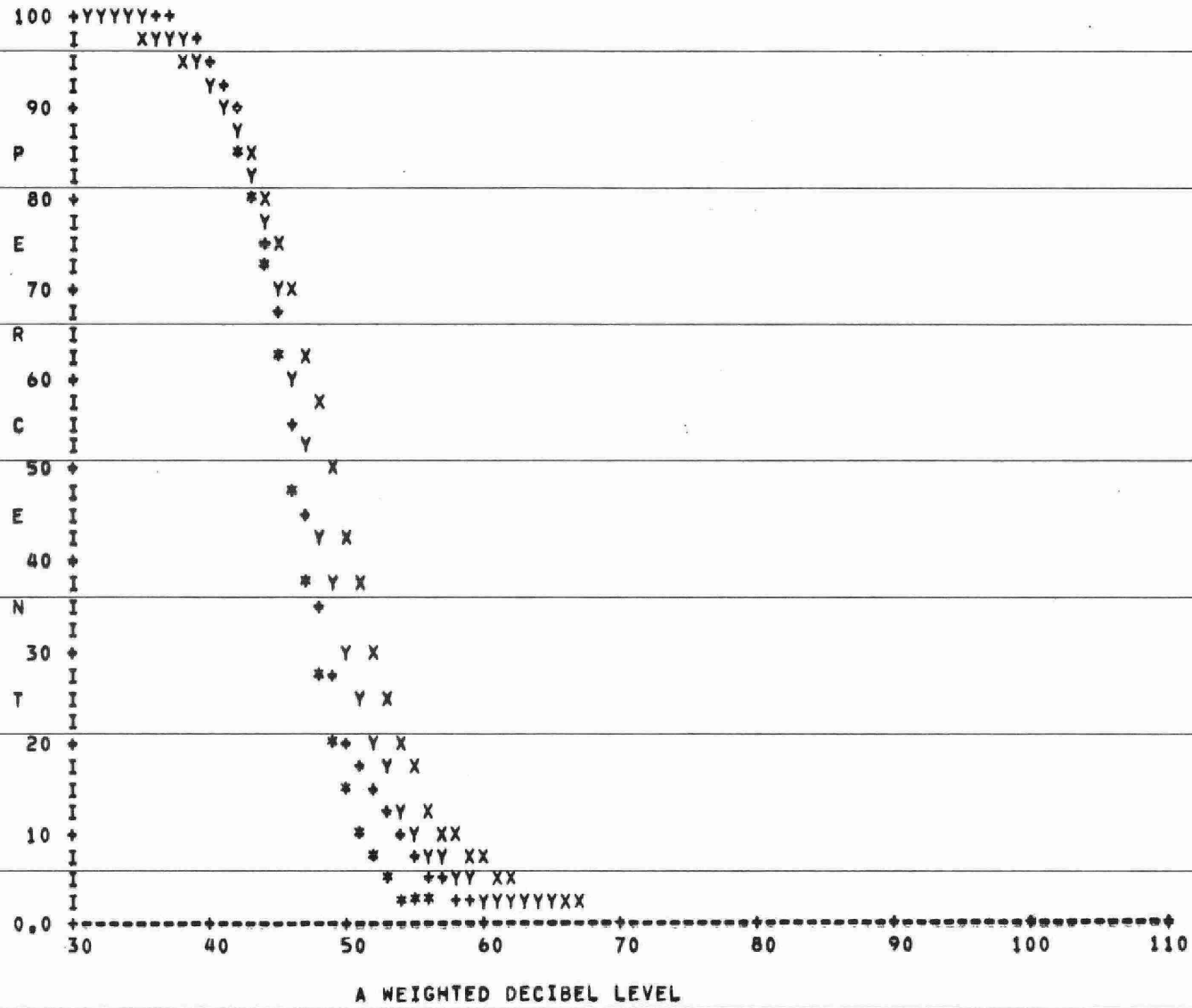
30 +

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
AM PM

HOUR OF DAY

26

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
 DATE AND LOCATION CODE 03TG4



DATE AND LOCATION CODE 04AG63

I *YX

	I	YX
	I	Y
90	+	+X
	I	Y
P	I	+X
	I	

80	+		
	I		Y
E	I		X
	I		
70	+		*
	I		

R	I	Y
	I	
60	+	+X
	I	
C	I	*
	I	

50	+	Y
	I	X
E	I	
	I	+
40	+	*
	I	Y

N	I	X
	I	
30	+	+
	I	*Y
T	I	X
	I	

20 + X
+ Y
I
I
I
10 + Y X
+ Y X
+ Y X X

I	+	I	XX
I	**	Y	YXX
I	+++	Y	YXX

A horizontal number line with arrows at both ends. It is marked with numbers 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, and 110. The numbers are placed below the line. There are tick marks at each number, and the line is divided into segments of 10 units each.

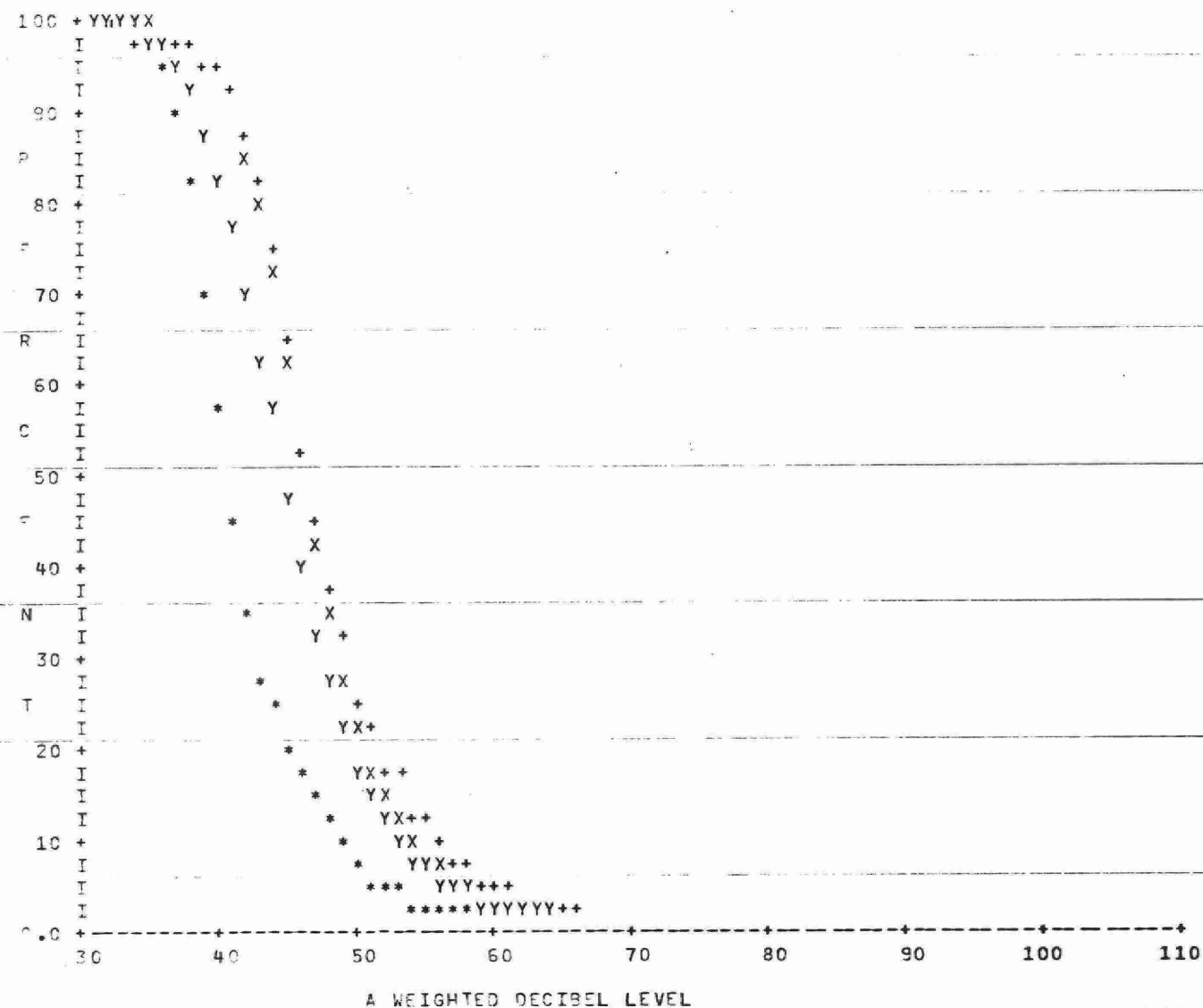
Community Description: site 4, residential; modern single family homes in residential area; Portsmouth Avenue, a major arterial, 200' to East; Johnson Street, a major arterial, 900' to South; Highway 33, 2500' to North.

A relatively quiet sound environment, residential activity and people sound are the major intrusions, traffic sounds and small aircrafts are occasional intrusive sources. The monitor was located on a hydro pole 15' above the roadway at the intersection of Robert Wallace Drive and MacKenzie Crescent, both local residential streets.

A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 040W3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

04MG3

PERIOD

L₁

L₁₀

L₅₀

L₉₀

TNI

L_{EQ}

SIGMA

NPL

110 +

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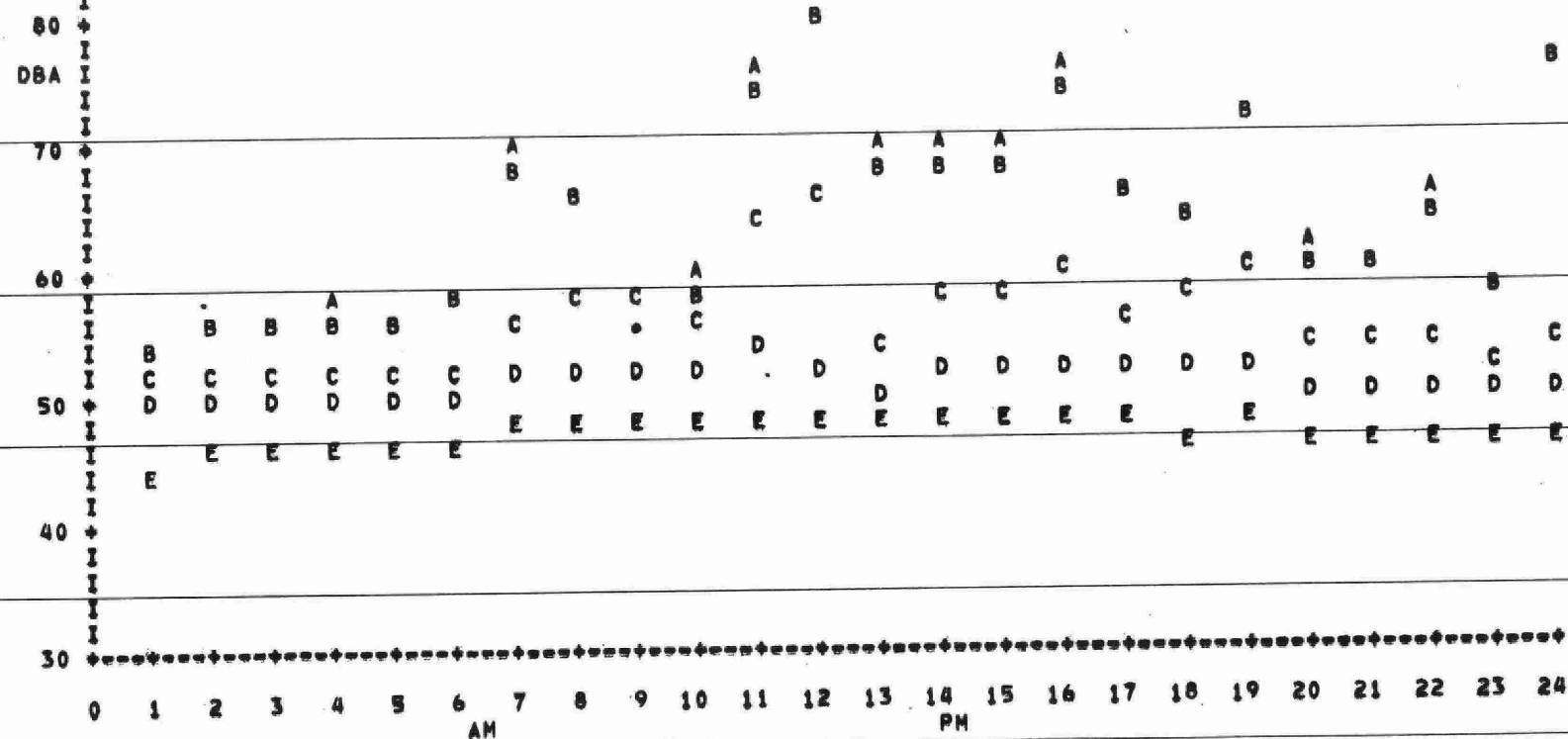
AM

PM

HOUR OF DAY

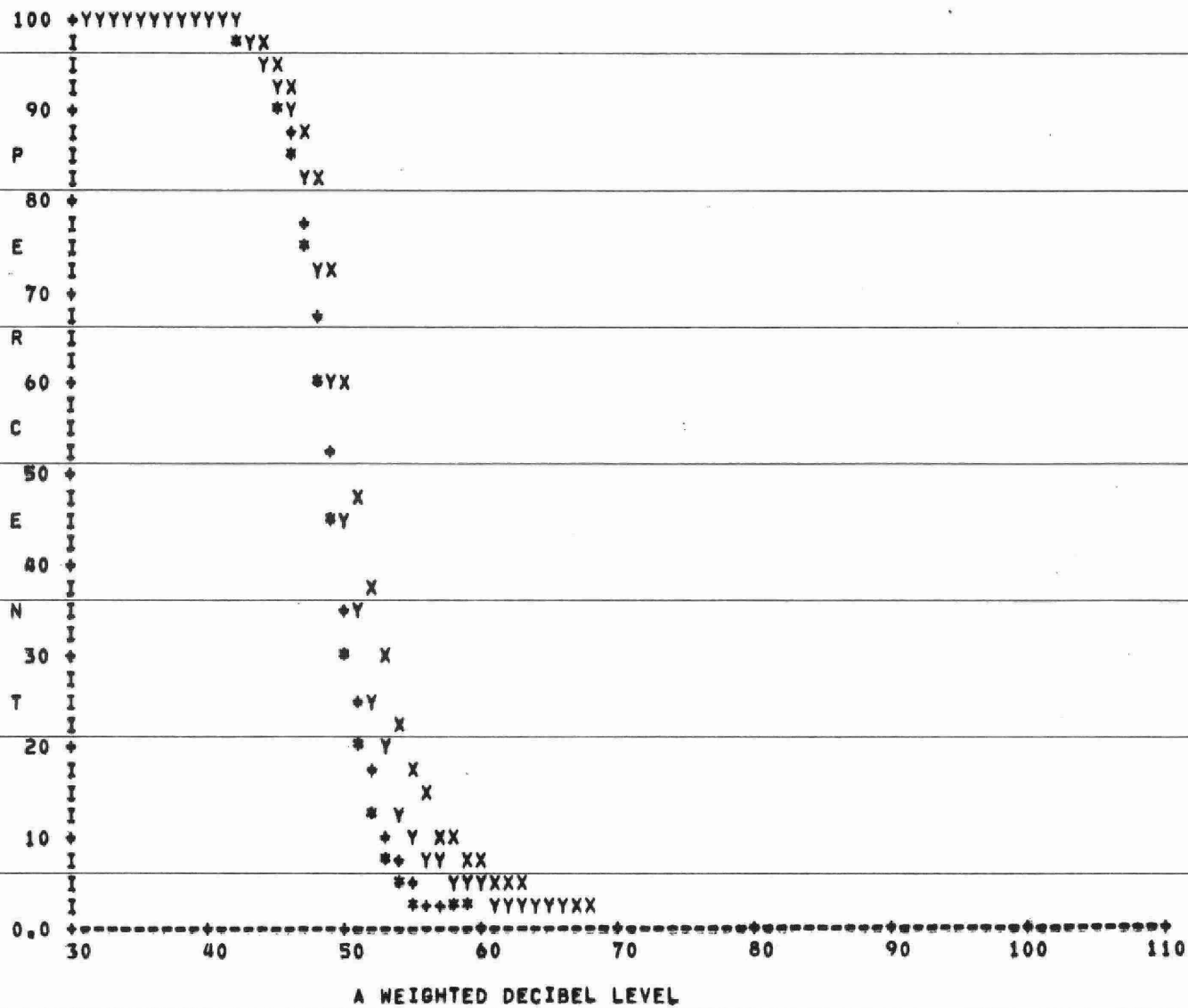
32

11p.m.-7a.m.	62	53	49	46	43.5	53.4	3.5	62.4
7a.m.-7p.m.	70	58	51	47	60.5		5.2	
7p.m.-11p.m.	59	54	50	46	47.5	51.2	3.2	59.4
24 hour	68	56	50	46	55.5		4.6	



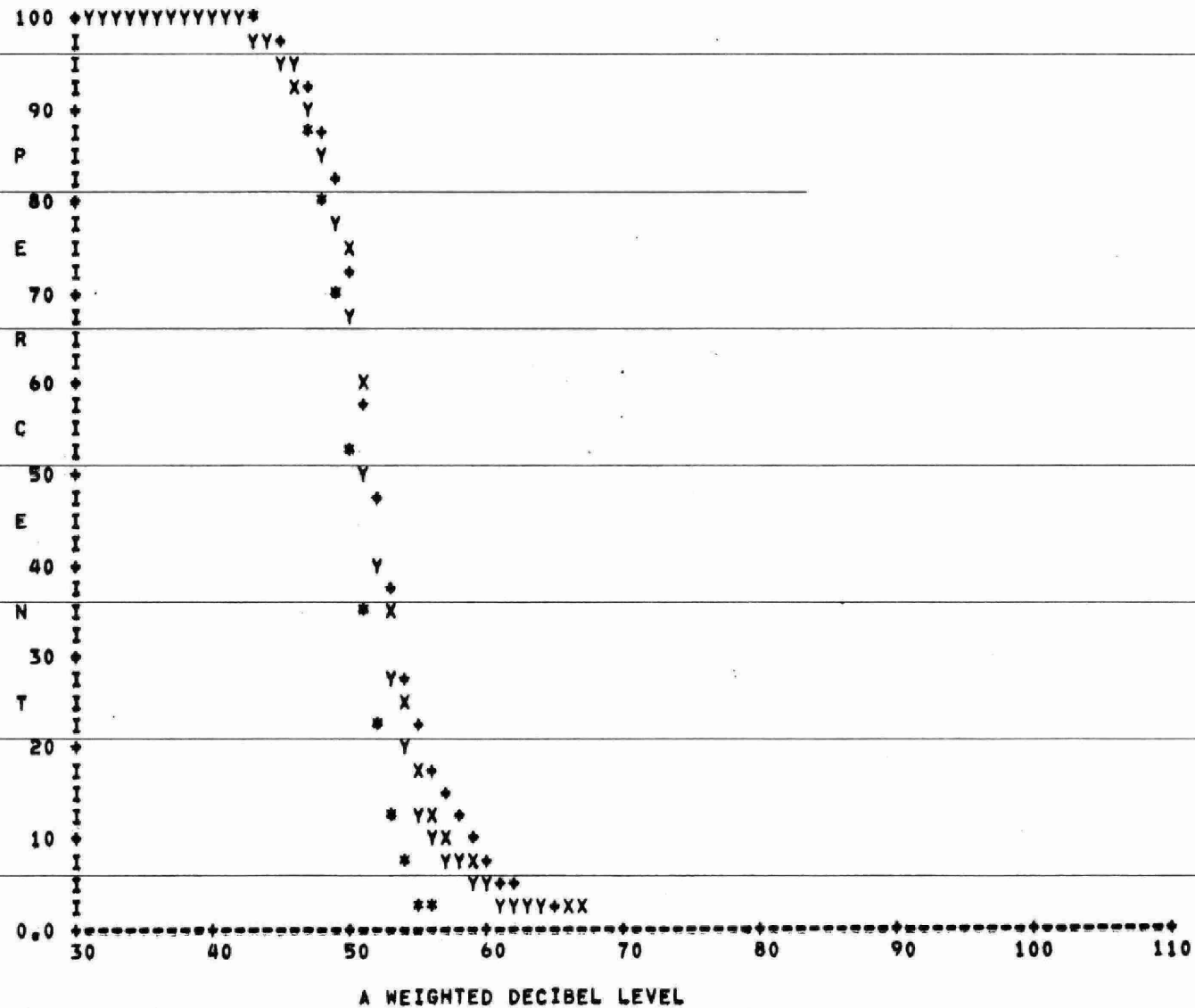
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 04MG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 04TG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

05F63

PERIOD

L₁

L₁₀

L₅₀

L₉₀

TNI

L_{EQ}

SIGMA

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11p.m.-7a.m.

61

48

41

37

50.5

5.0

7a.m.-7p.m.

69

59

49

43

76.5

56.7

6.7

73.8

7p.m.-11p.m.

75

60

52

44

77.5

60.7

7.1

78.9

24 hour

69

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47

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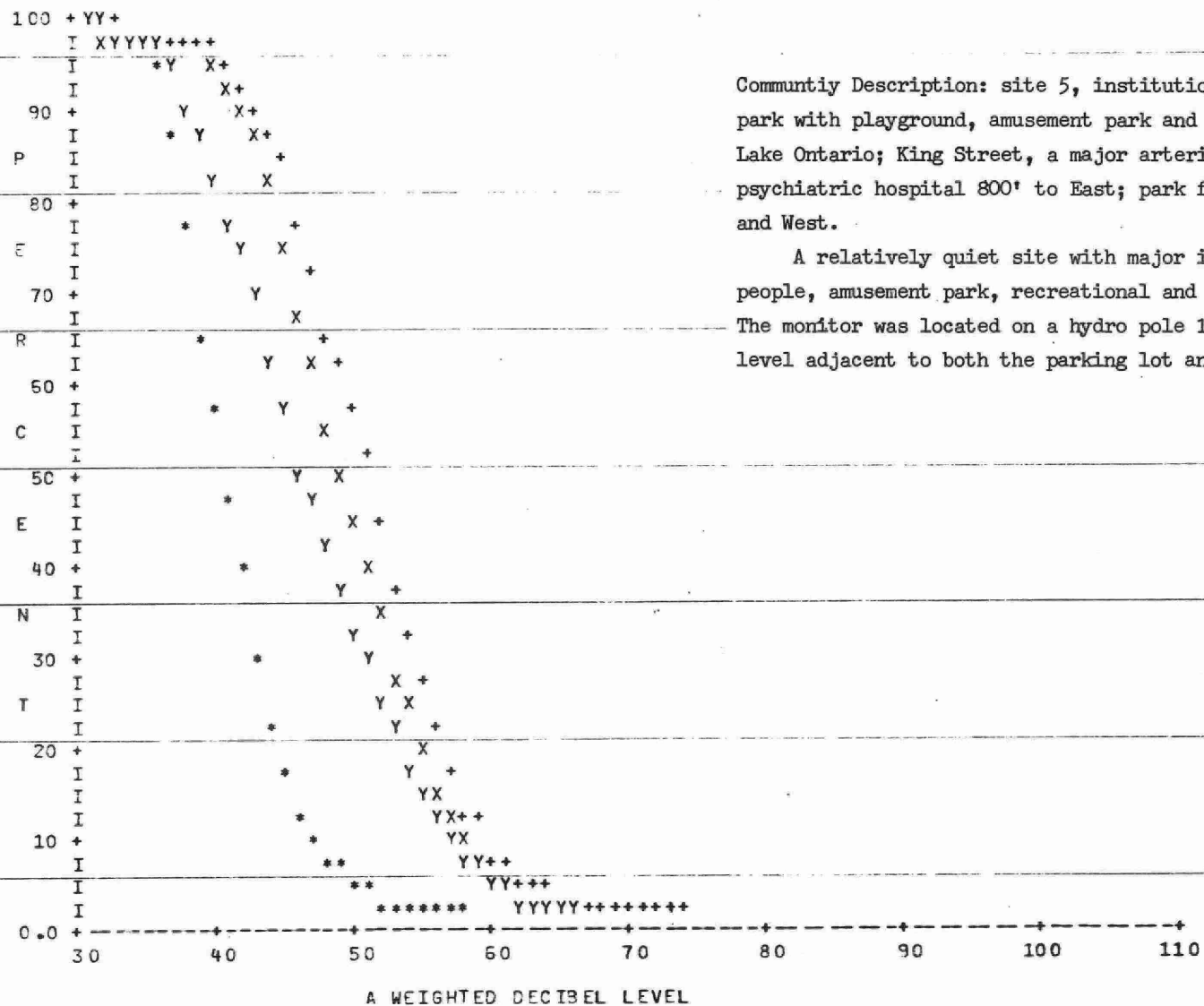
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PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 05FG3

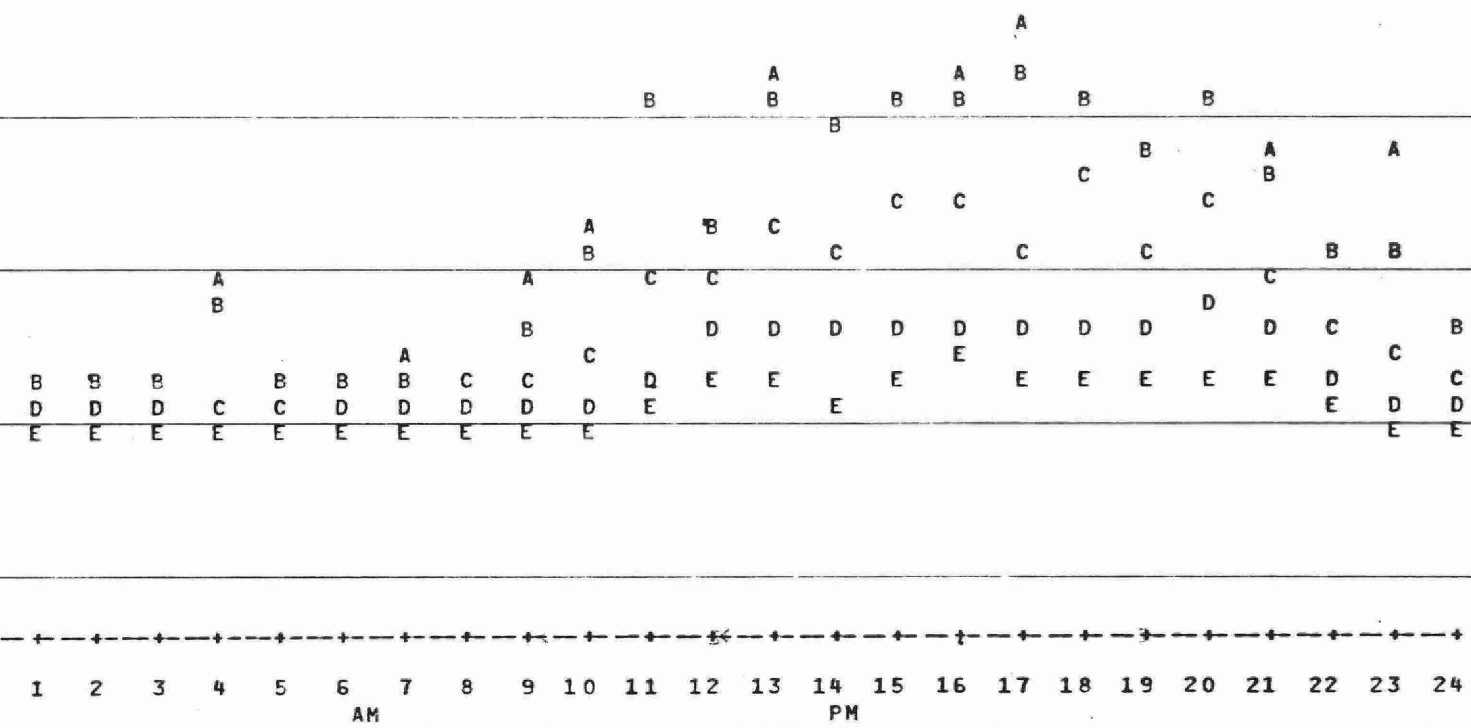


Community Description: site 5, institutional; a major public park with playground, amusement park and camping facilities on Lake Ontario; King Street, a major arterial, 1000' to North; psychiatric hospital 800' to East; park facilities to the South and West.

A relatively quiet site with major intrusive sounds from people, amusement park, recreational and parking lot activities. The monitor was located on a hydro pole 15' above the ground level adjacent to both the parking lot and the park.

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	51	48	47	45	26.5	46.9	1.9	51.7
7a.m.-7p.m.	70	59	52	46	67.5	57.6	5.9	72.6
7p.m.-11p.m.	68	58	51	47	60.5	56.1	5.2	69.3
24 hour	69	57	49	46	59.5	55.7	5.5	69.7

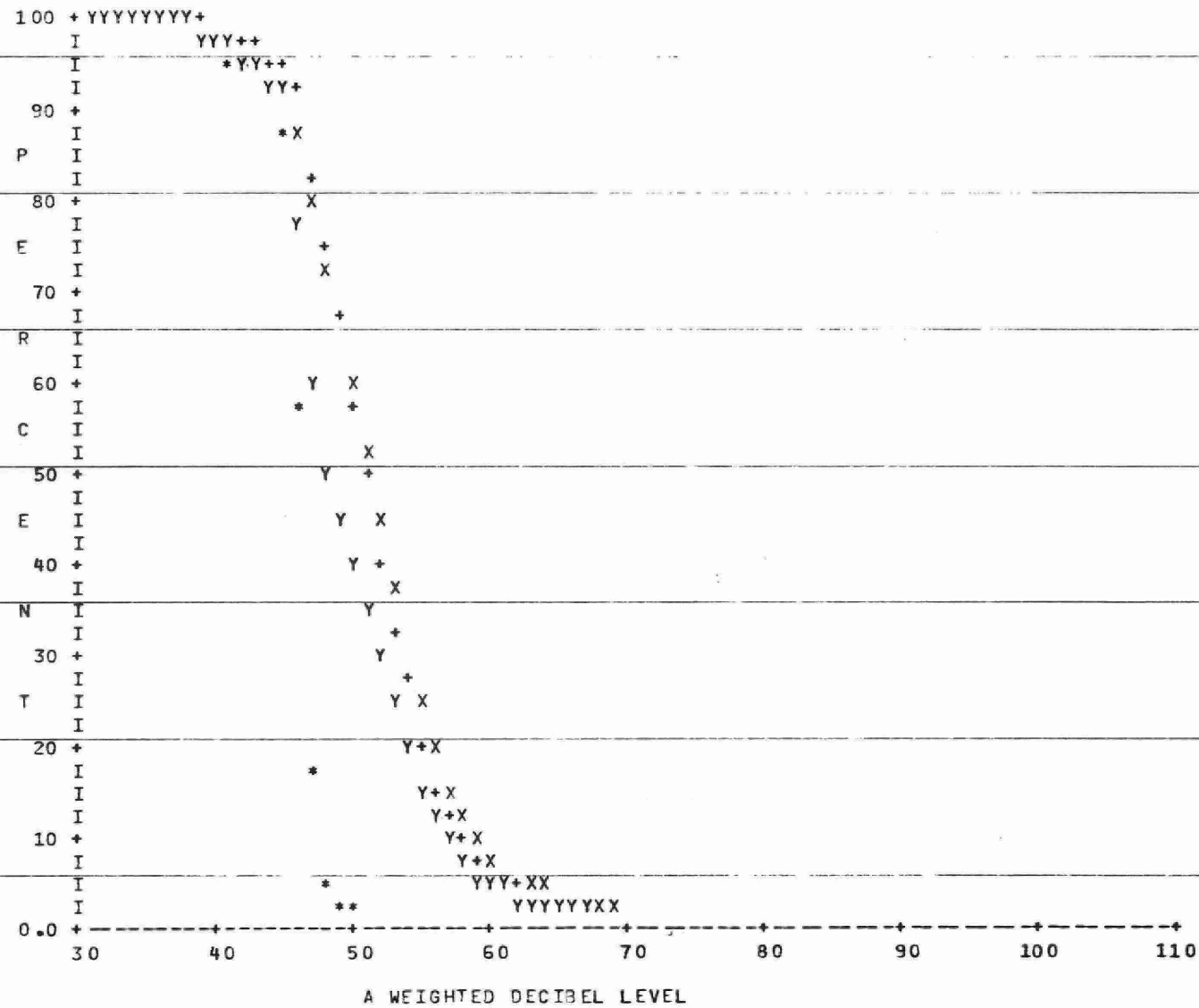
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HOUR OF DAY

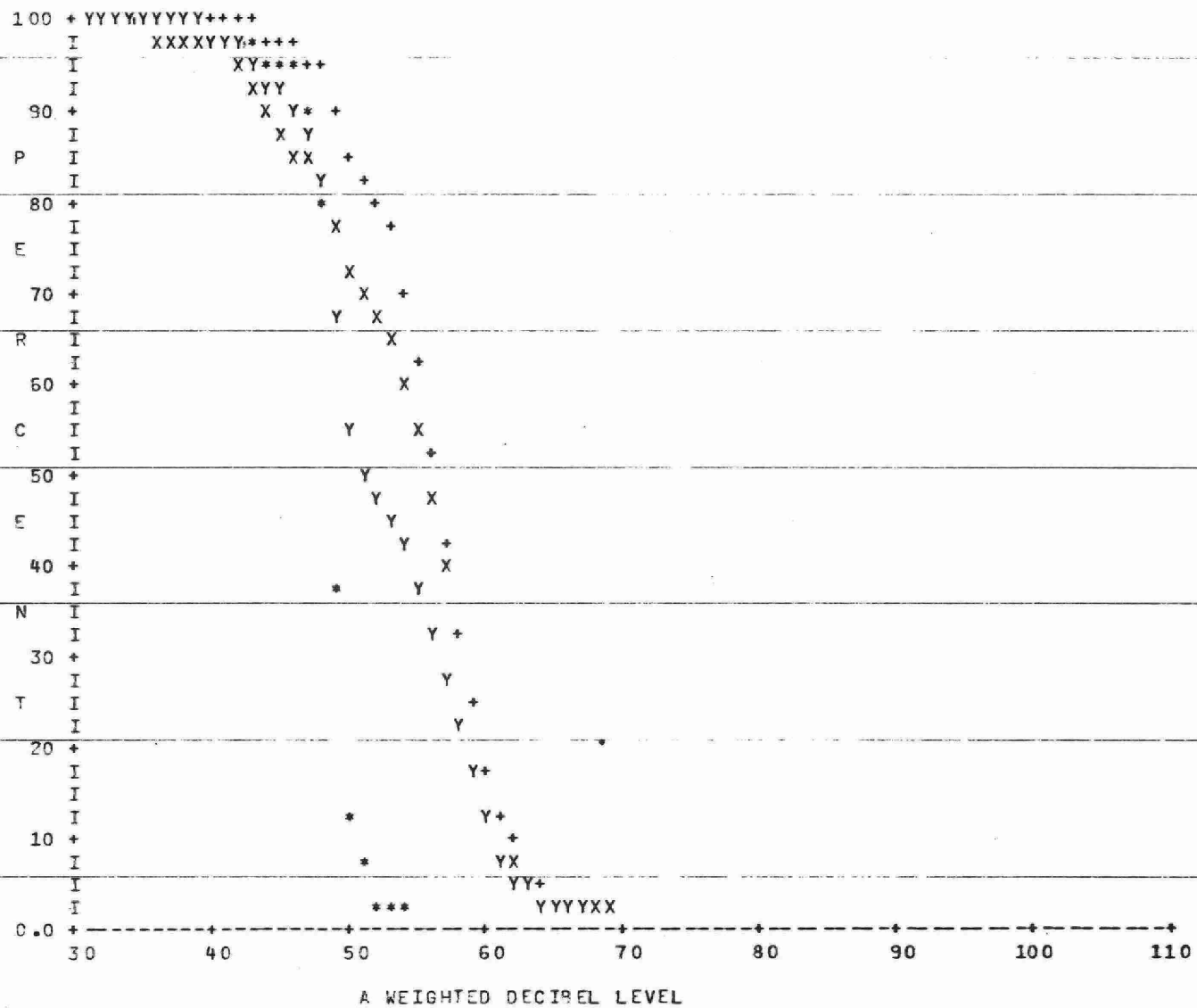
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 05A63



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 05UG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

05HG3

PERIOD

L₁

L₁₀

L₅₀

L₉₀

TNI

L_{BQ}

SIGMA

NPL

110 +

100 +

90 +

80 +

DBA

70 +

60 +

50 +

40 +

30 +

11p.m.-7a.m.

53

50

47

43

40.5

47.3

2.8

54.5

7a.m.-7p.m.

72

58

50

45

66.5

58.8

6.1

74.5

7p.m.-11p.m.

68

56

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45

58.5

56.5

5.2

69.8

24 hour

69

56

48

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61.5

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5.5

70.8

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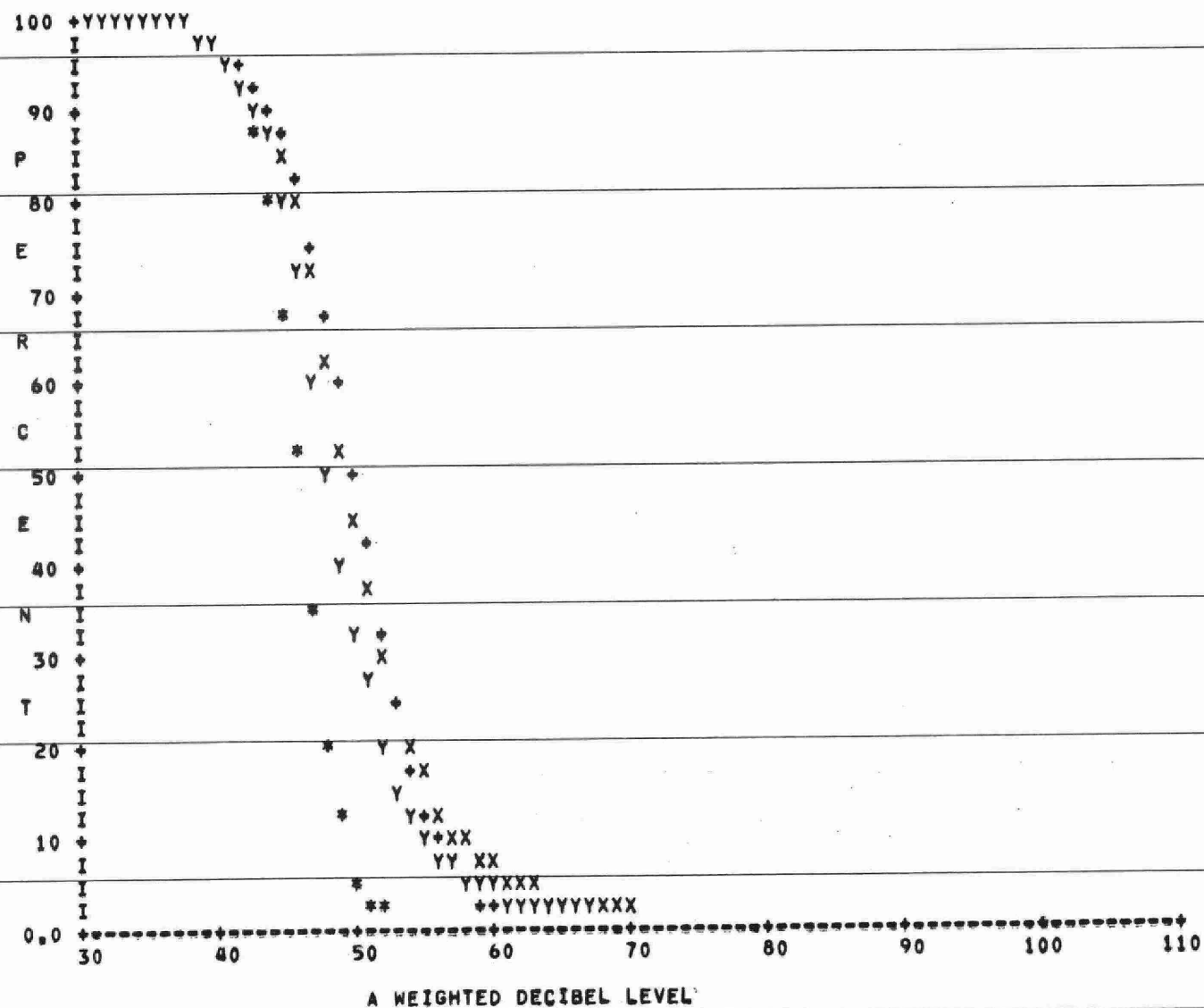
AM

PM

HOUR OF DAY

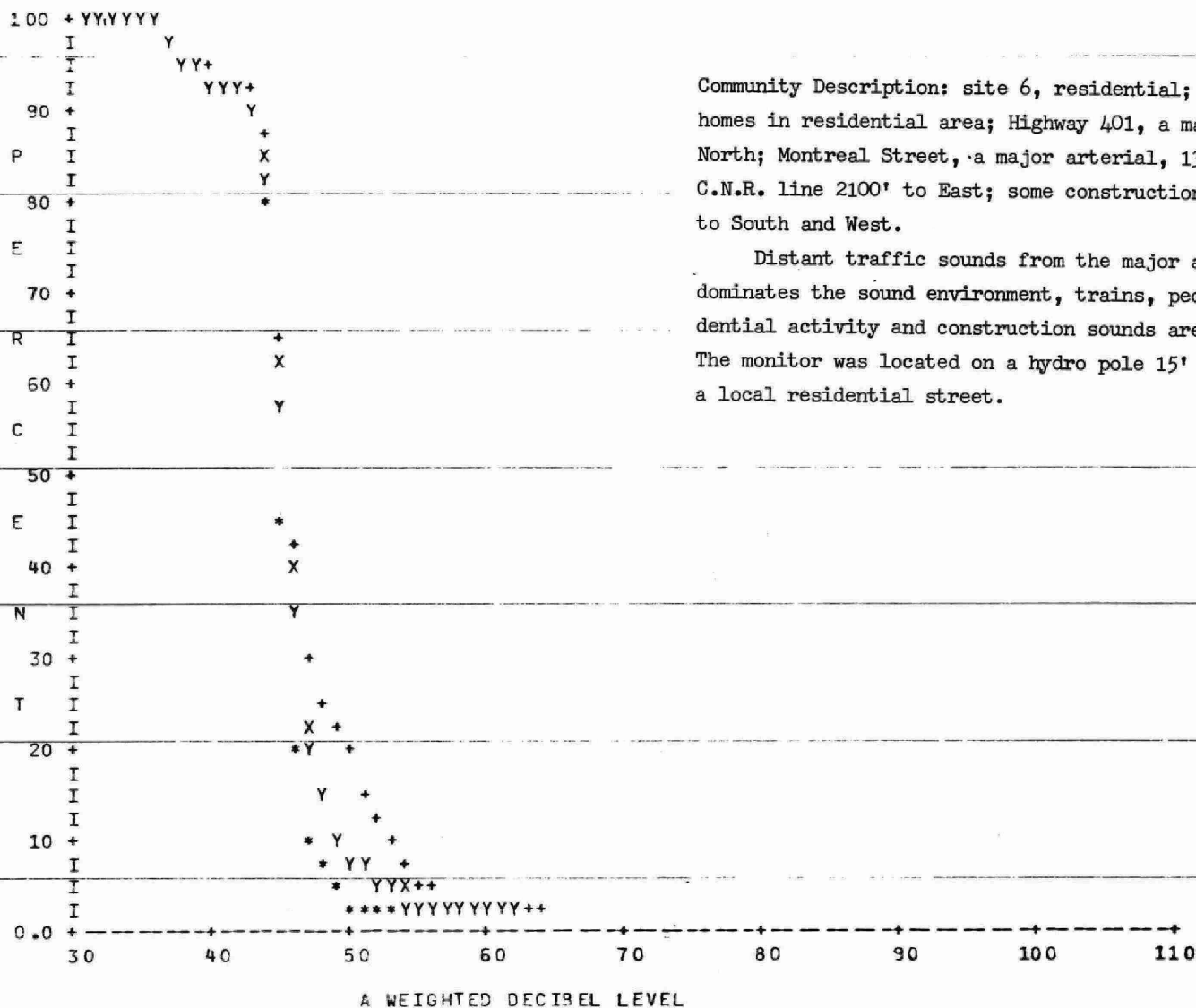
42

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
 DATE AND LOCATION CODE 05HG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 06M63



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

06T63

PERIOD

L₁L₁₀L₅₀L₉₀

TNI

L_{EQ}

SIGMA

NPL

110 +	11p.m.-7a.m.	54	48	44	42	35.5	45.8	3.3	54.2
I	7a.m.-7p.m.	62	50	45	42	43.5	55.0	4.8	67.4
I	7p.m.-11p.m.	52	47	44	42	31.5	46.0	3.1	54.0
100 +	24 hour	59	49	44	42	39.5	52.5	4.1	63.1
I									

90 +

80 +

DBA

70 +

60 +

50 +

40 +

30 +

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AM

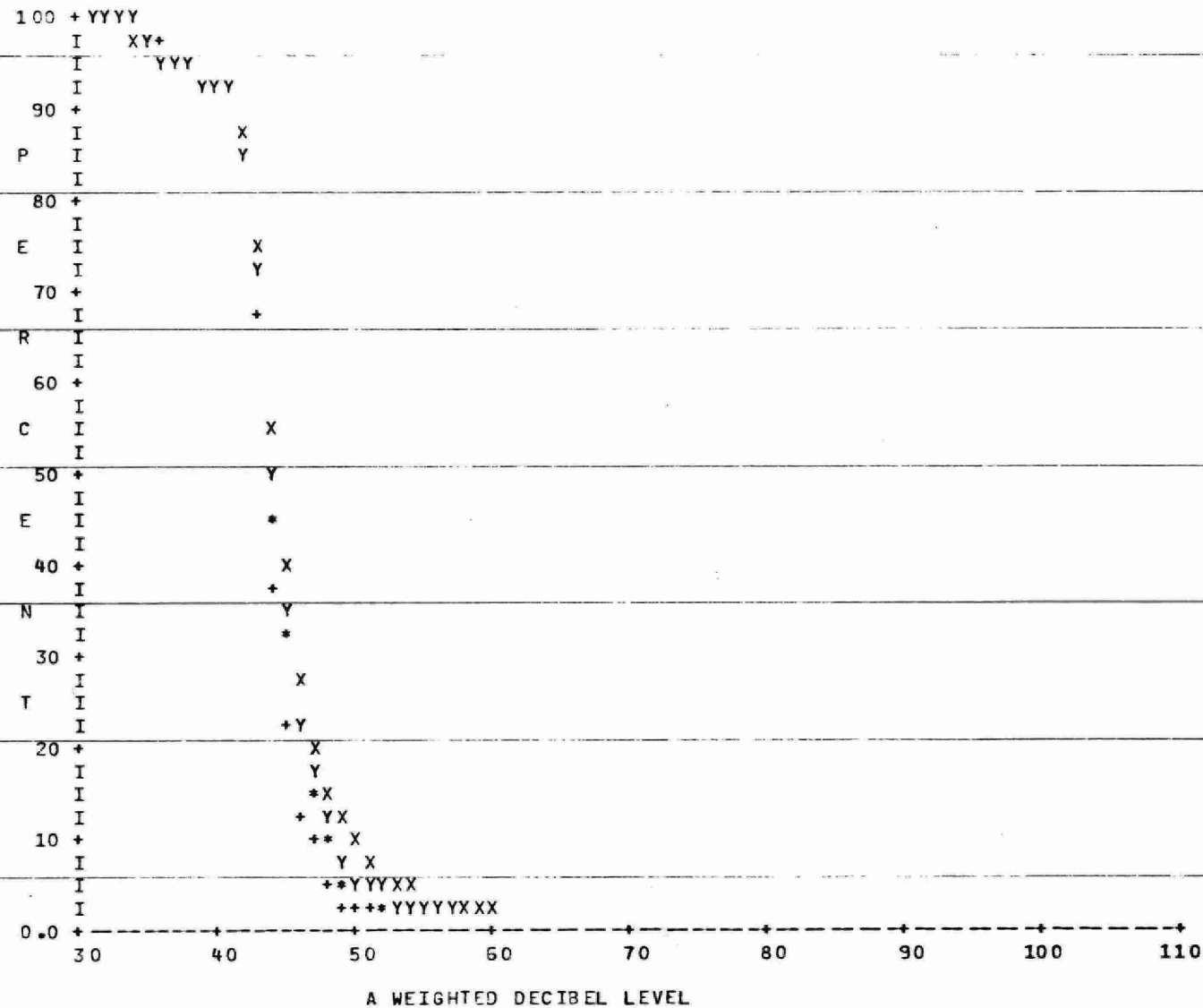
PM

HOUR OF DAY

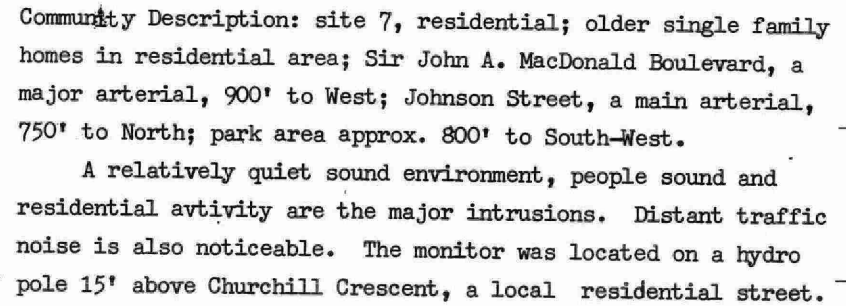
46

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 06T63



DATE AND LOCATION CODE 07WG3



DATE AND LOCATION CODE 07FG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 08FG4

100 + YYYYYYYYYY

I Y

I YX

I Y+

90 + YX

I *

P I +

I

80 +

I YX

E I

I

70 +

I

R I

I

60 +

I

C I

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50 +

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E I

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40 +

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N I

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30 +

I

T I

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20 +

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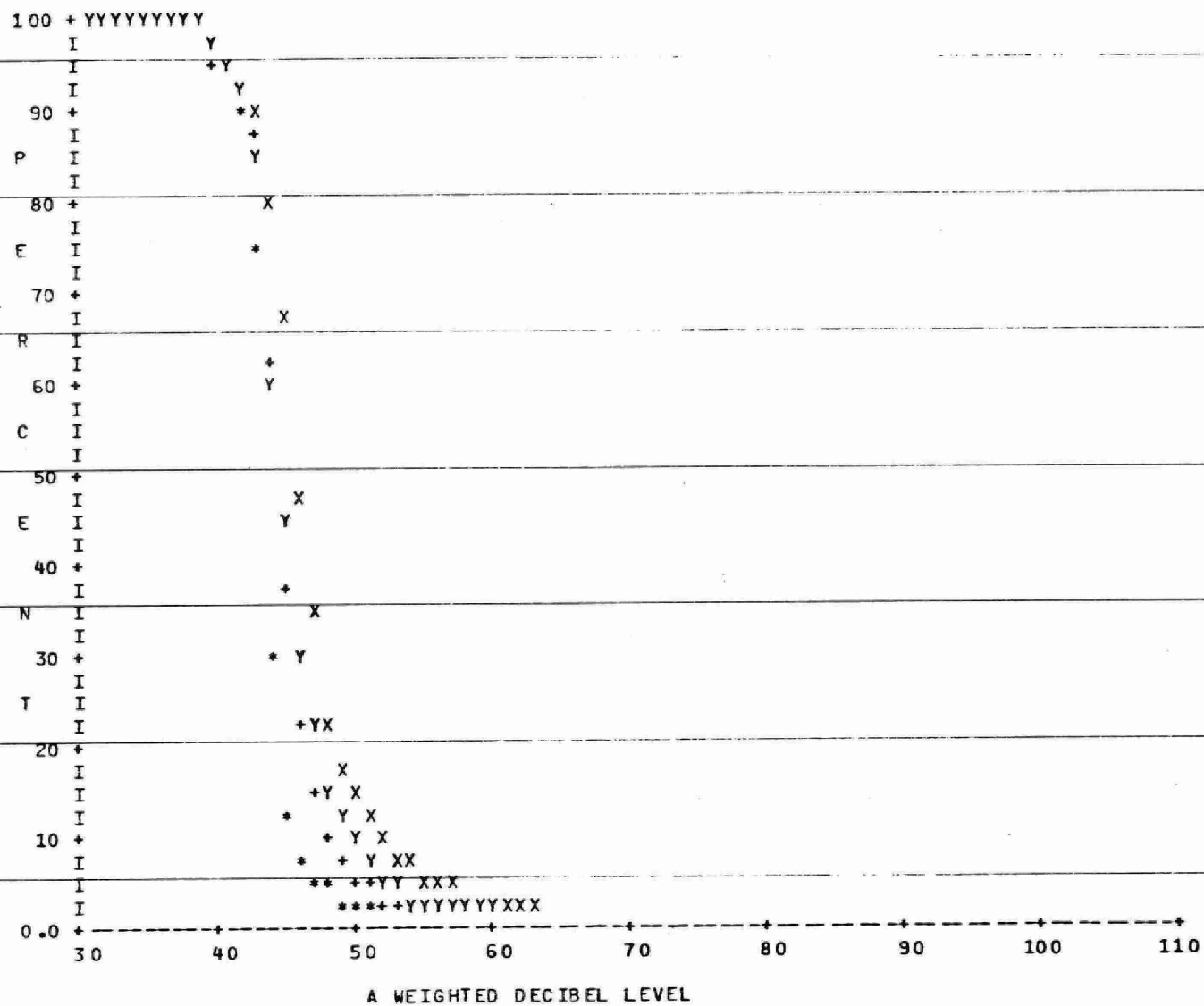
Community Description: site 8, residential institutional; older mixed residential area consisting of single family detached homes, duplexes and renovated apartments adjacent to city park and Queen's University; King Street, a busy street, 400' to South; Johnson Street, a main arterial, 1200' to North-East; MacDonald Park 200' to West.

Distant traffic sound dominates the sound environment, people sounds, residential and considerable recreational activity from the park are significant intrusions. The monitor was located on a hydro pole 15' above the intersection of Wellington Street and Lower Union Street, both local streets.

A WEIGHTED DECIBEL LEVEL

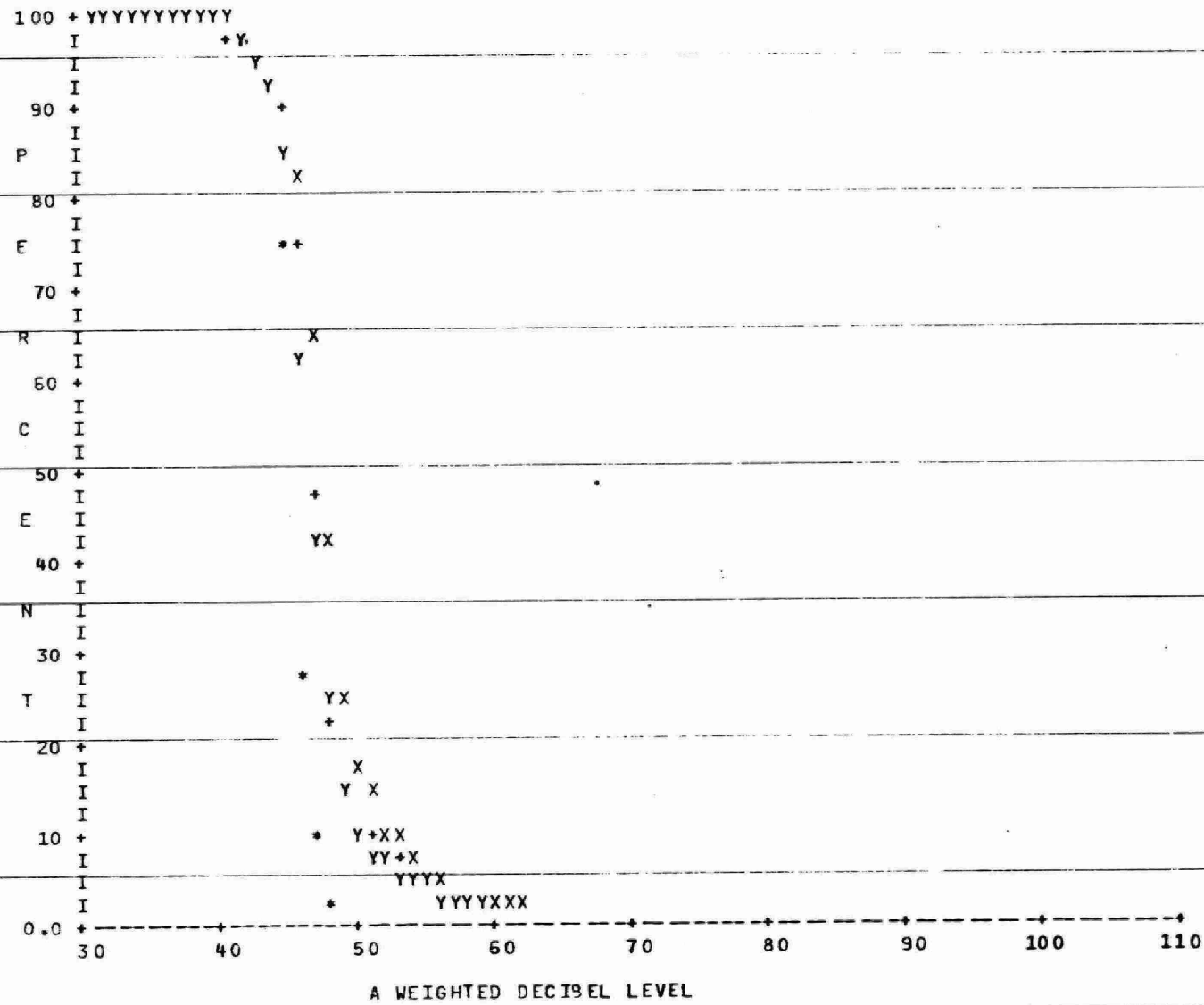
PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 08A64



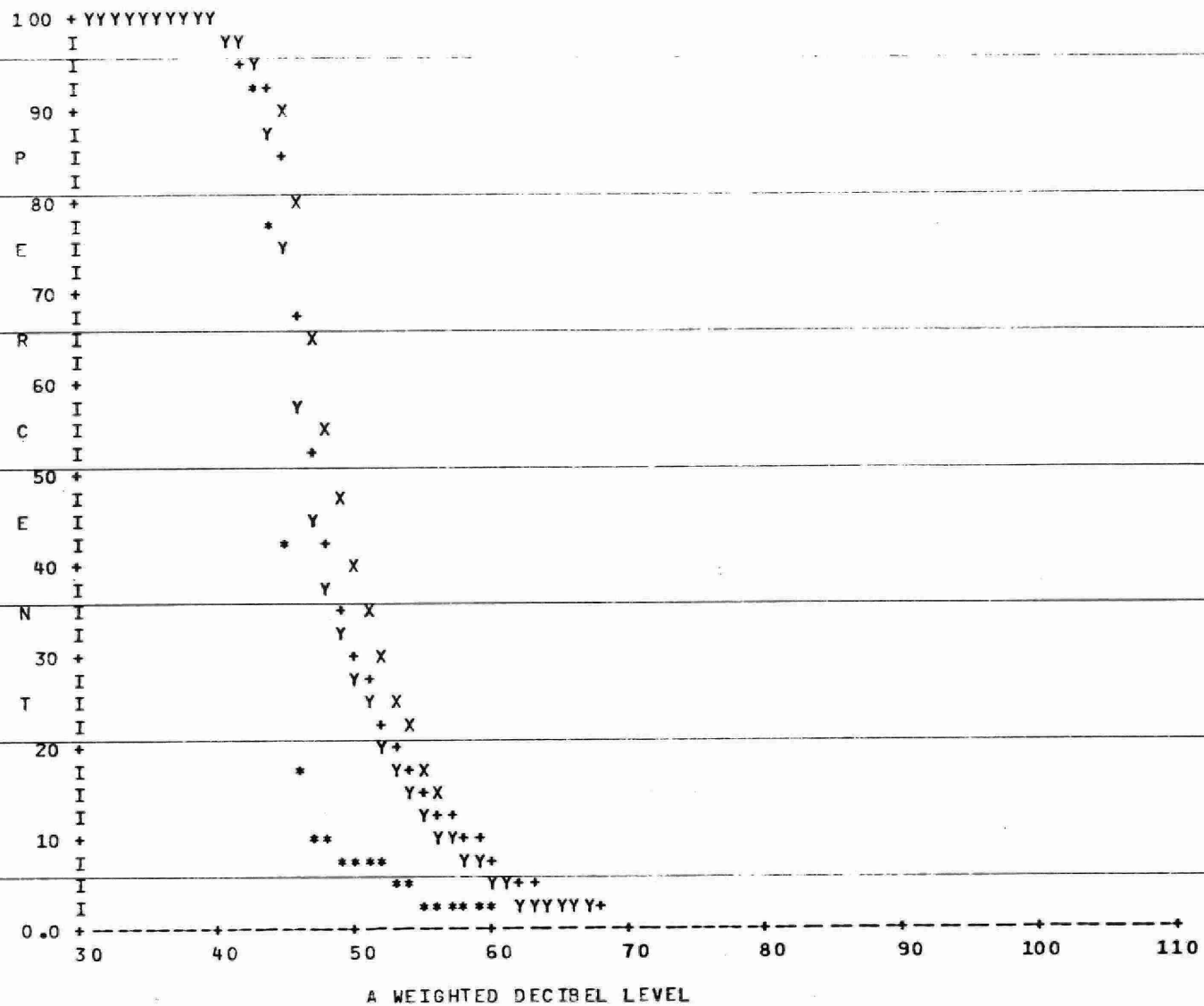
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 08UG4



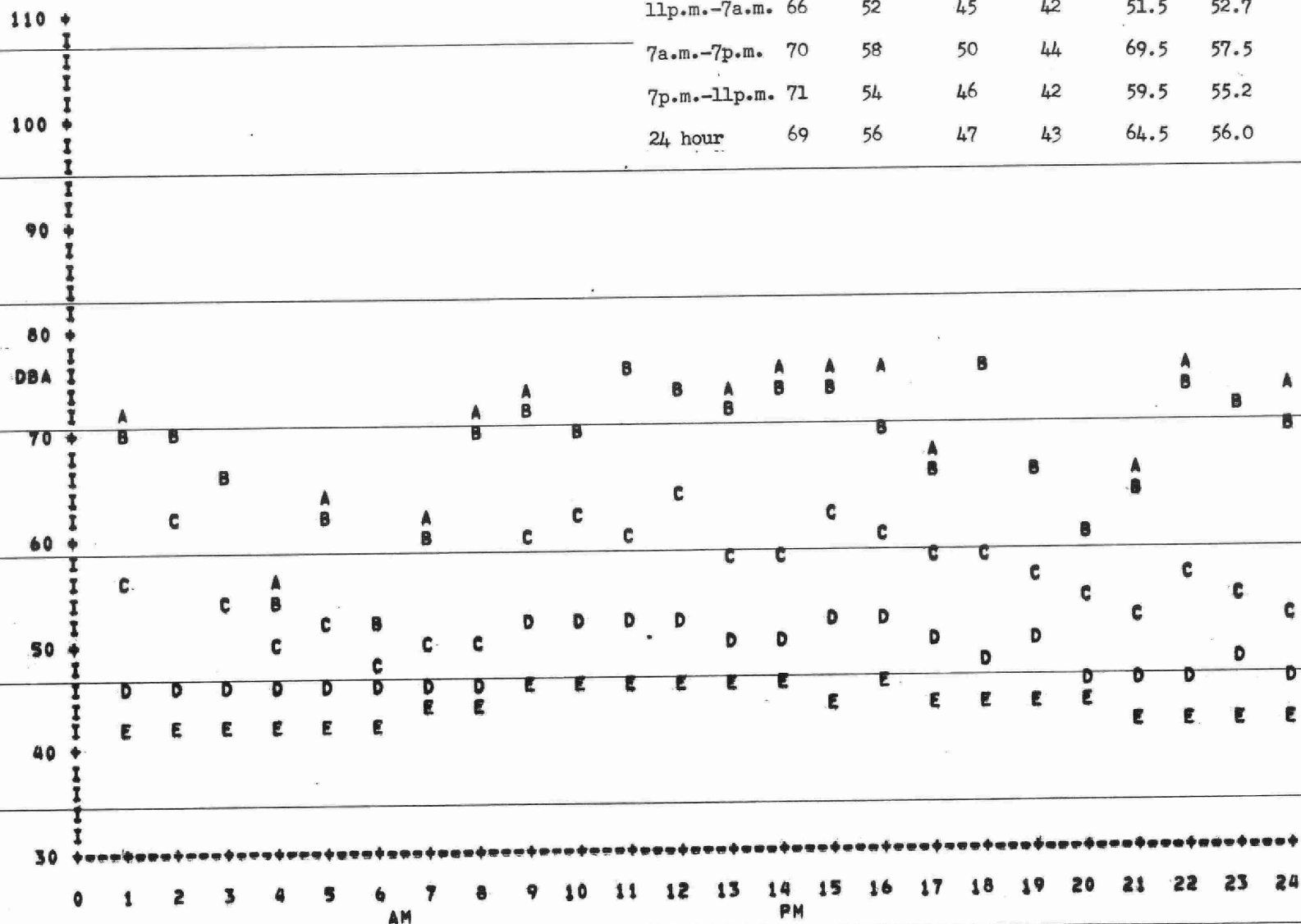
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 08MG4



24 HOUR NOISE CLIMATE
DATE AND LOCATION CODE 09AG3

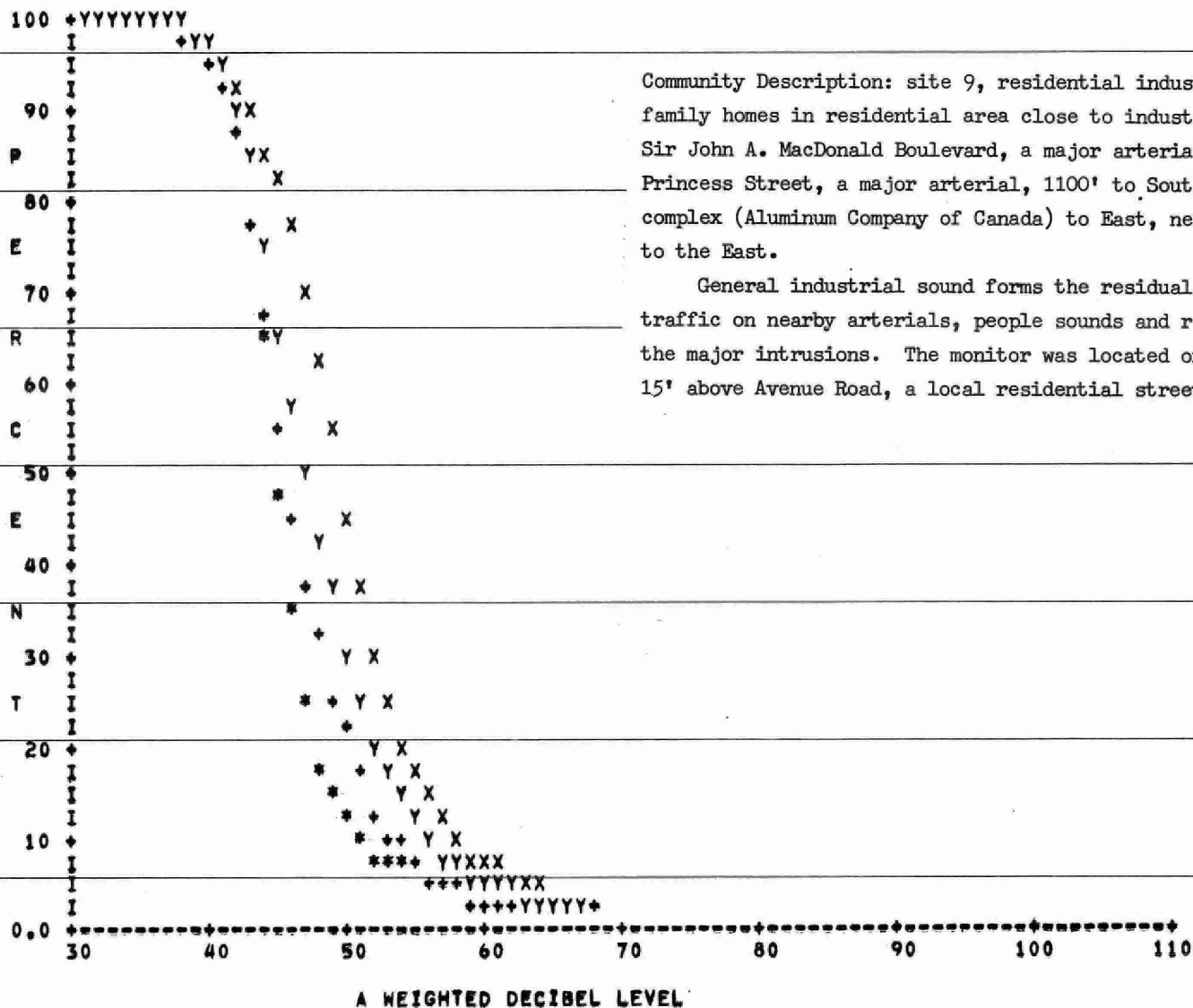
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	66	52	45	42	51.5	52.7	4.9	65.2
7a.m.-7p.m.	70	58	50	44	69.5	57.5	6.2	73.5
7p.m.-11p.m.	71	54	46	42	59.5	55.2	5.6	69.6
24 hour	69	56	47	43	64.5	56.0	6.1	71.5



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 09AG3



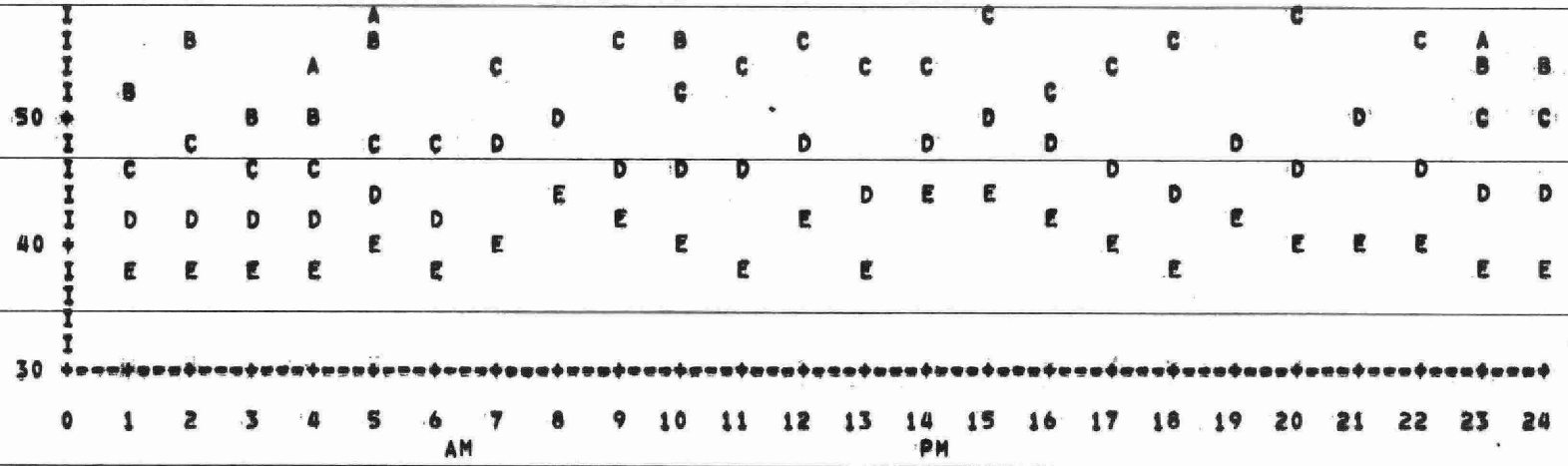
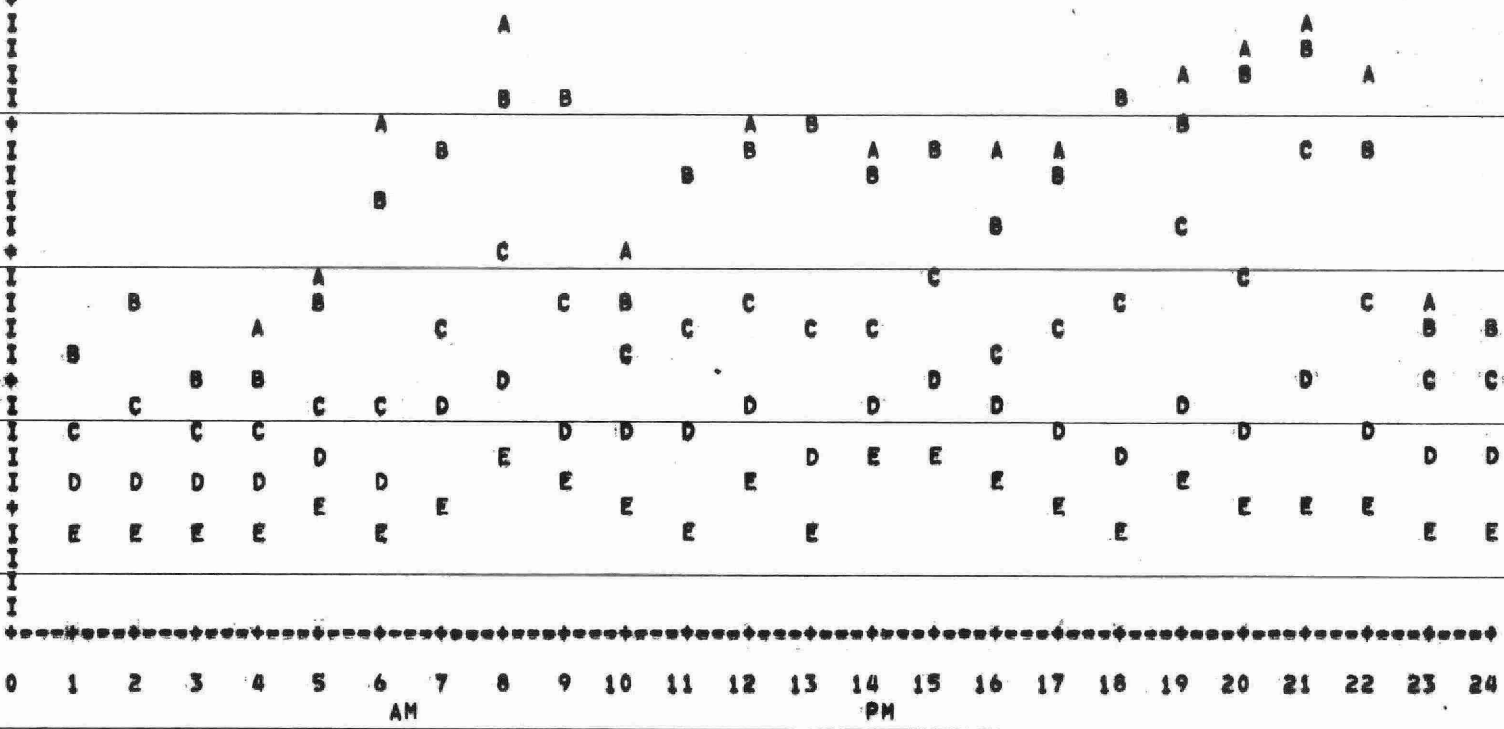
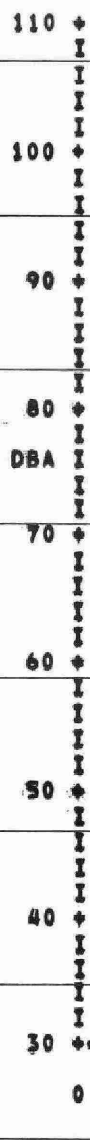
Community Description: site 9, residential industrial; single family homes in residential area close to industrial complex; Sir John A. MacDonald Boulevard, a major arterial, 200' to East; Princess Street, a major arterial, 1100' to South; industrial complex (Aluminum Company of Canada) to East, nearest plant 1000' to the East.

General industrial sound forms the residual noise level with traffic on nearby arterials, people sounds and residential activities the major intrusions. The monitor was located on a hydro pole 15' above Avenue Road, a local residential street.

24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 09UG3

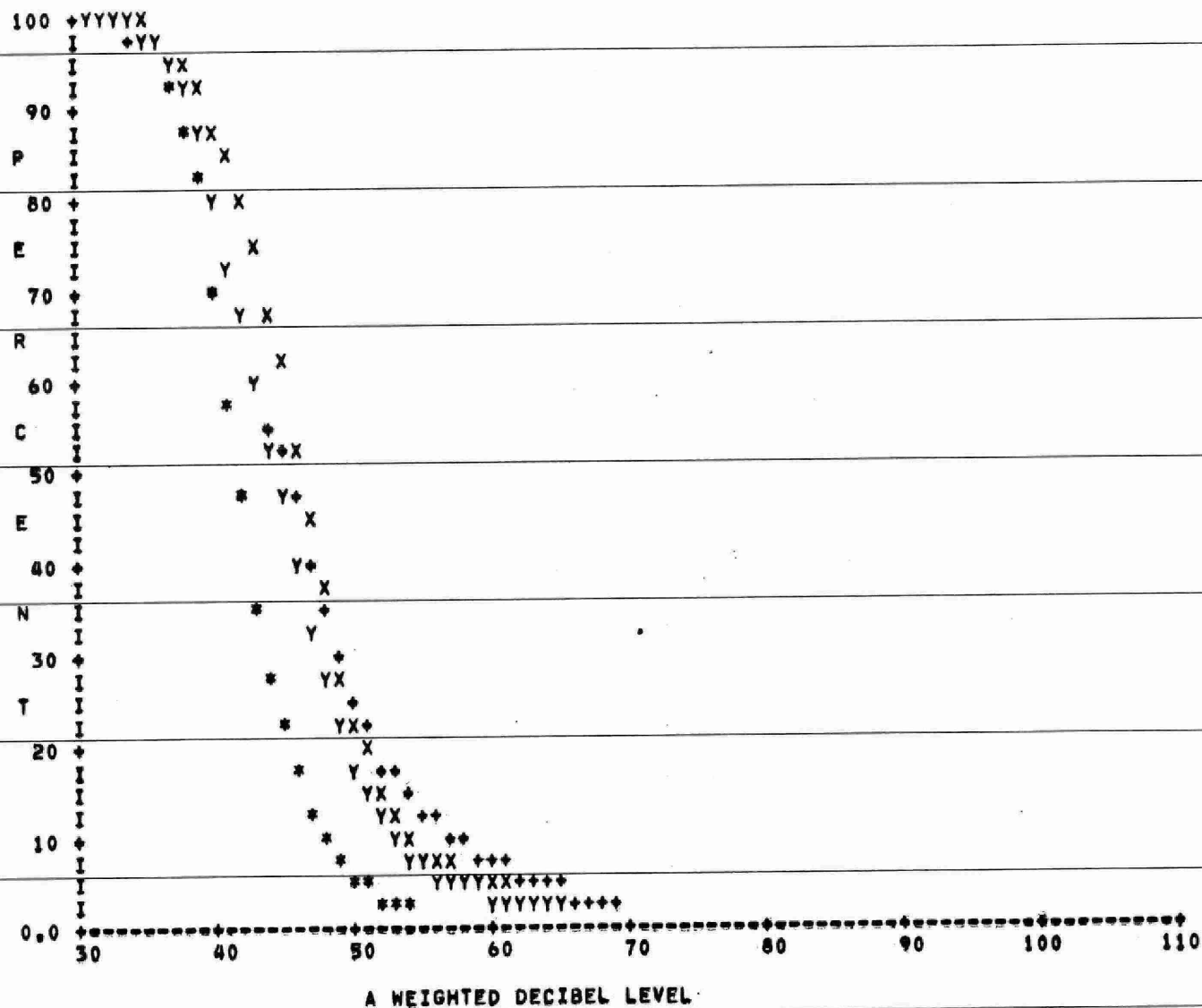
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	56	48	42	38	47.5	46.9	4.3	58.0
7a.m.-7p.m.	67	55	47	40	69.5	54.4	6.3	70.5
7p.m.-11p.m.	70	58	46	39	84.5	57.8	7.9	77.9
24 hour	67	53	45	39	64.5	54.1	6.4	70.4



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 09UG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

09MG3

PERIOD

 L_1 L_{10} L_{50} L_{90}

TNI

 L_{EQ}

SIGMA

NPL

110

100

90

80

DBA

70

60

50

40

30

11p.m.-7a.m.

52

47

40

34

55.5

43.3

4.9

55.7

7a.m.-7p.m.

68

53

43

36

73.5

56.8

7.3

75.5

7p.m.-11p.m.

68

52

42

34

75.5

56.8

7.8

76.8

24 hour

66

51

42

35

68.5

55.1

6.9

72.9

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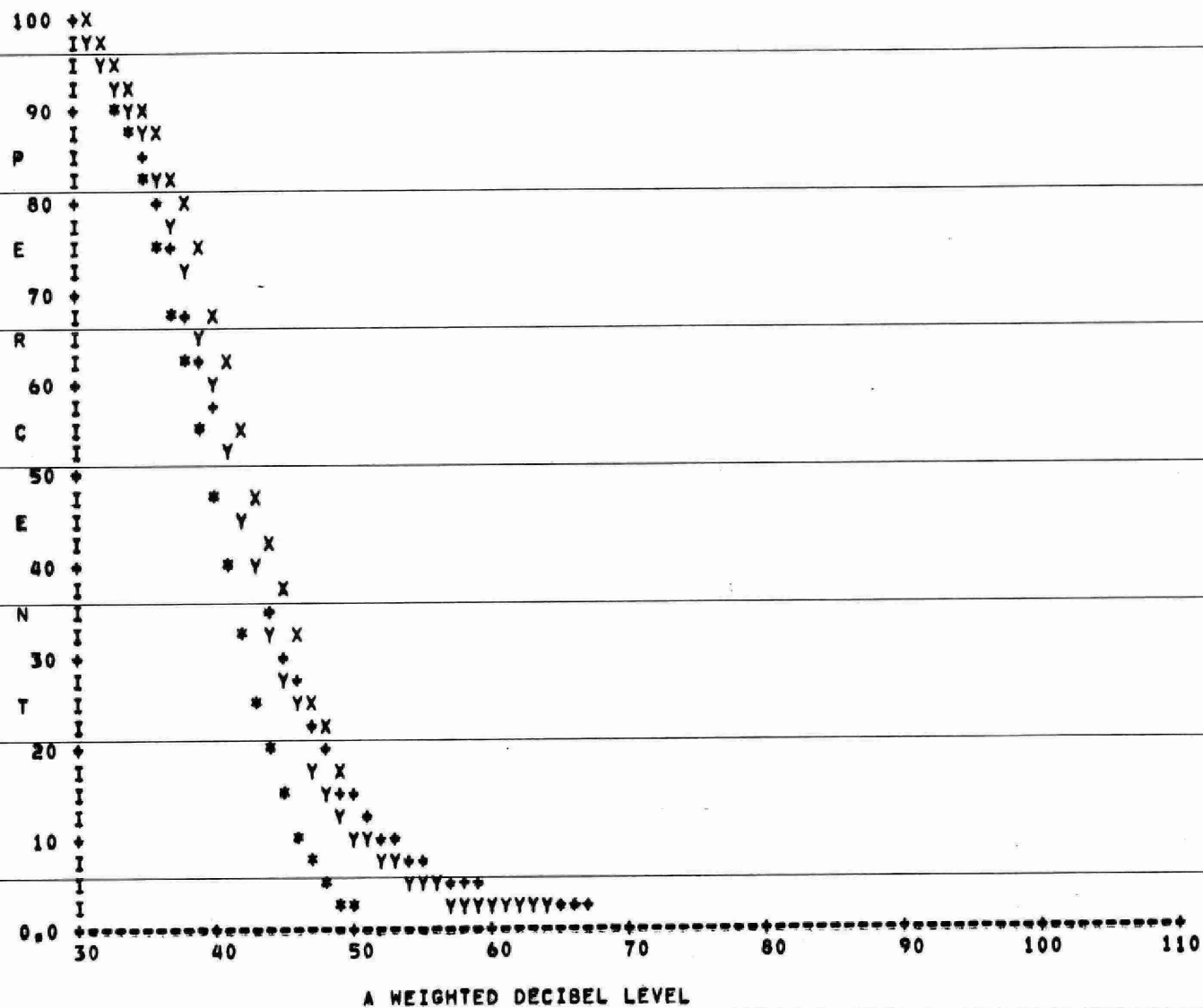
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
DATE AND LOCATION CODE 09MG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

09TG3

PERIOD

 L_1 L_{10} L_{50} L_{90}

TNI

 L_{EQ}

SIGMA

NPL

110

100

90

80

DBA

70

60

50

40

30

11p.m.-7a.m.

57

48

42

38

47.5

45.7

4.3

56.7

7a.m.-7p.m.

70

58

48

40

81.5

57.2

7.3

76.0

7p.m.-11p.m.

66

53

44

38

67.5

52.9

6.5

69.5

24 hour

68

55

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54.8

6.8

72.3

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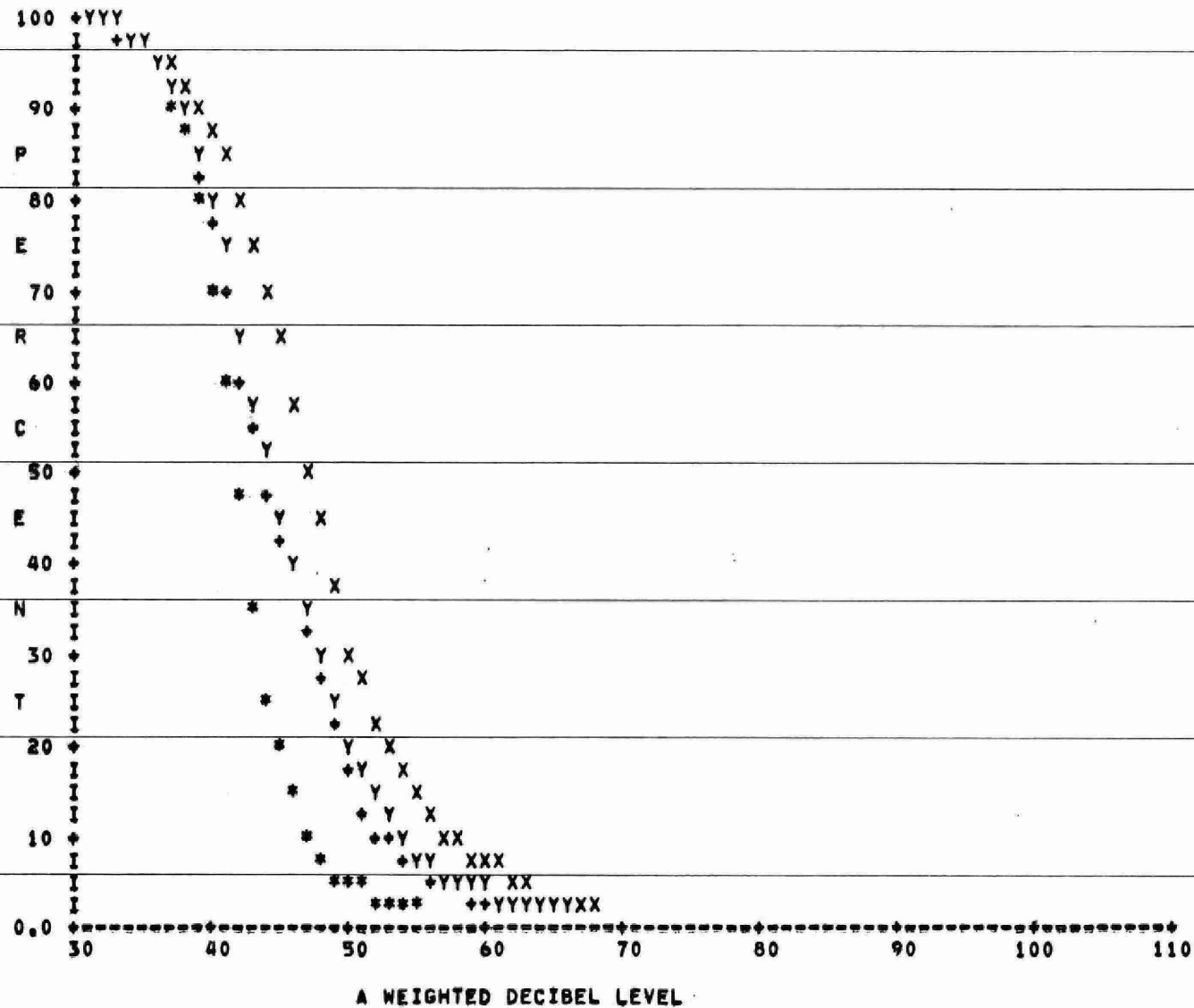
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 09TG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

10AG3

PERIOD

 L_1 L_{10} L_{50} L_{90}

TNI

 L_{EQ}

SIGMA

NPL

110 +

100 +

90 +

80 +

DBA

70 +

60 +

50 +

40 +

30 +

0

1

2

3

4

5

6

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24

AM

PM

HOUR OF DAY

70

11p.m.-7a.m.	59	52	47	43	48.5	49.8	3.7	59.3
7a.m.-7p.m.	64	55	47	42	63.5	52.4	5.1	65.3
7p.m.-11p.m.	68	54	47	43	56.5	54.7	5.0	67.5
24 hour	63	54	47	43	56.5	52.2	4.7	64.2

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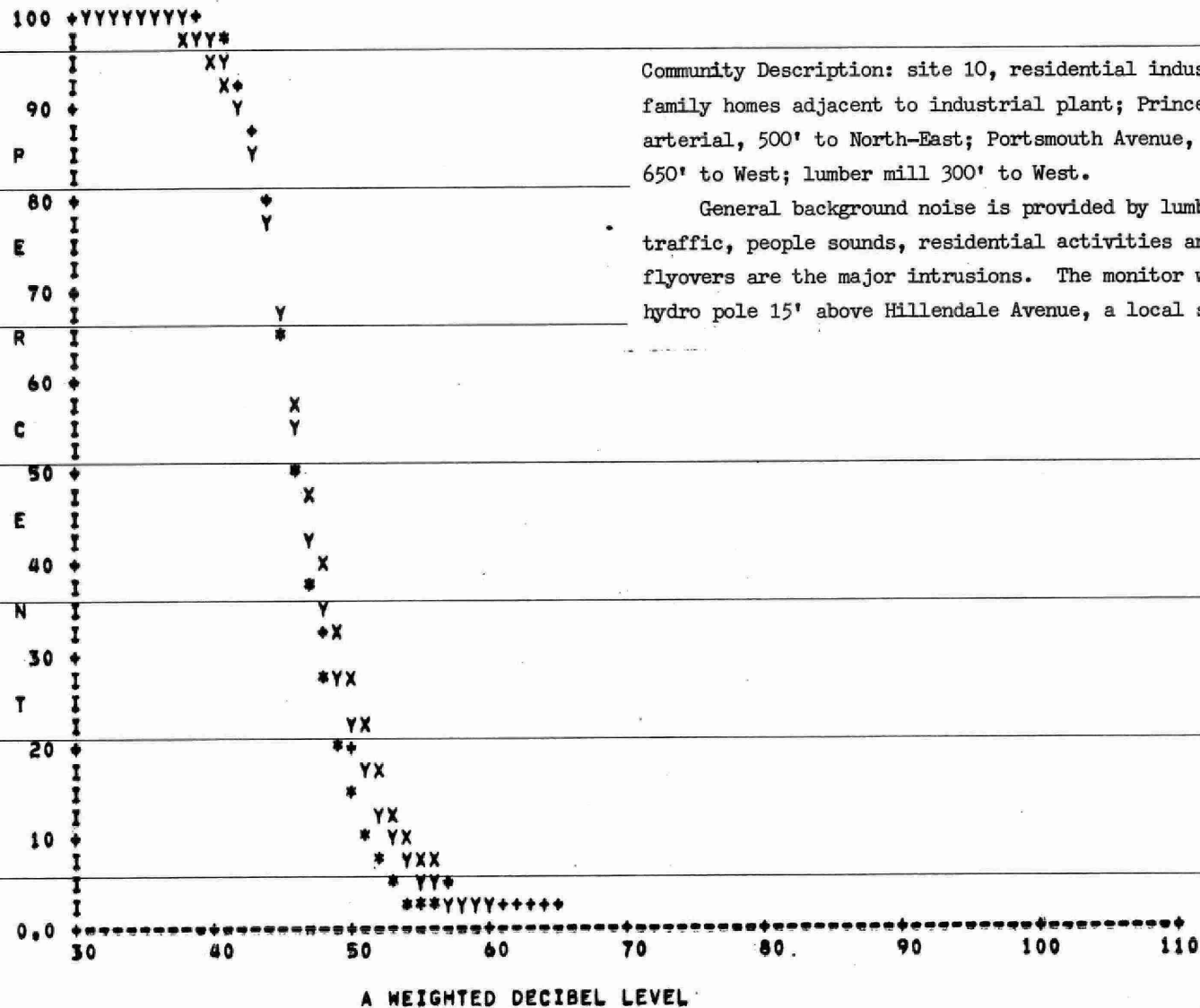
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PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 10A63



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

10UG3

PERIOD

L₁L₁₀L₅₀L₉₀

TNI

L_{BQ}

SIGMA

NPL

110 +

I

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I

100 +

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90 +

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11p.m.-7a.m. 60

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49.5

49.5

4.3

60.7

7a.m.-7p.m. 65

52

46

41

54.5

52.7

5.2

66.1

7p.m.-11p.m. 64

54

46

41

62.5

51.8

5.3

65.4

24 hour

63

52

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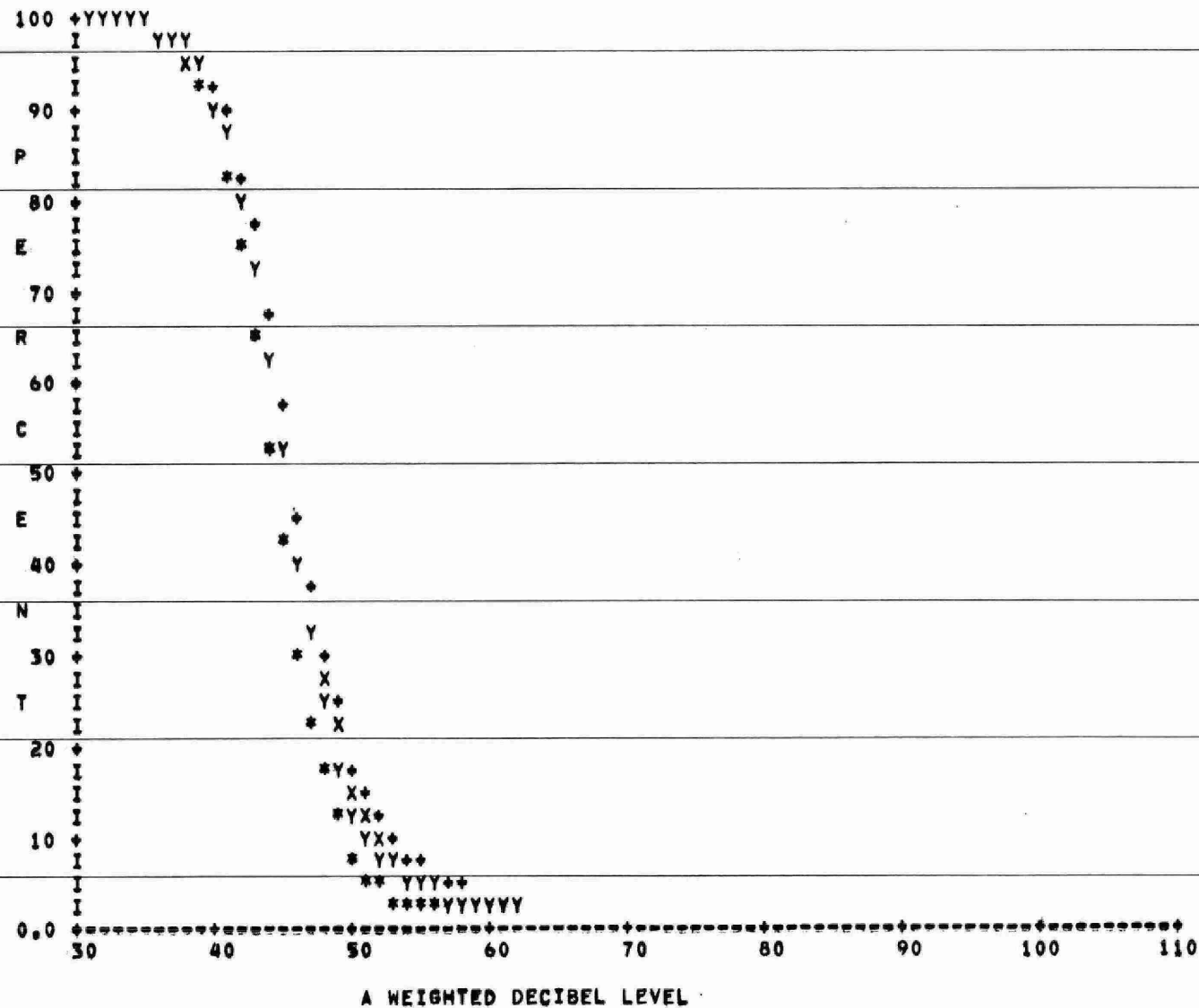
B

HOUR OF DAY

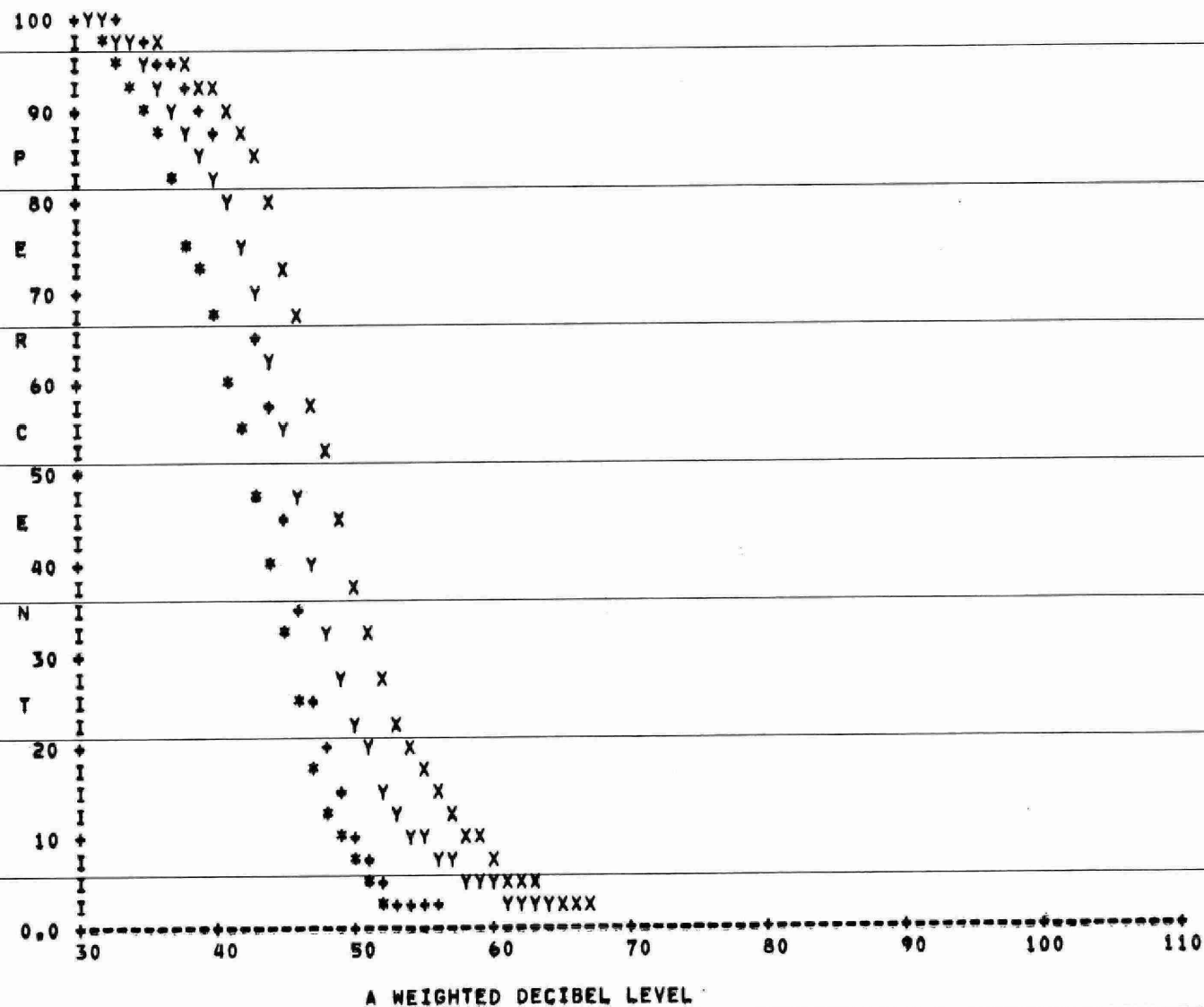
72

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 10UG3

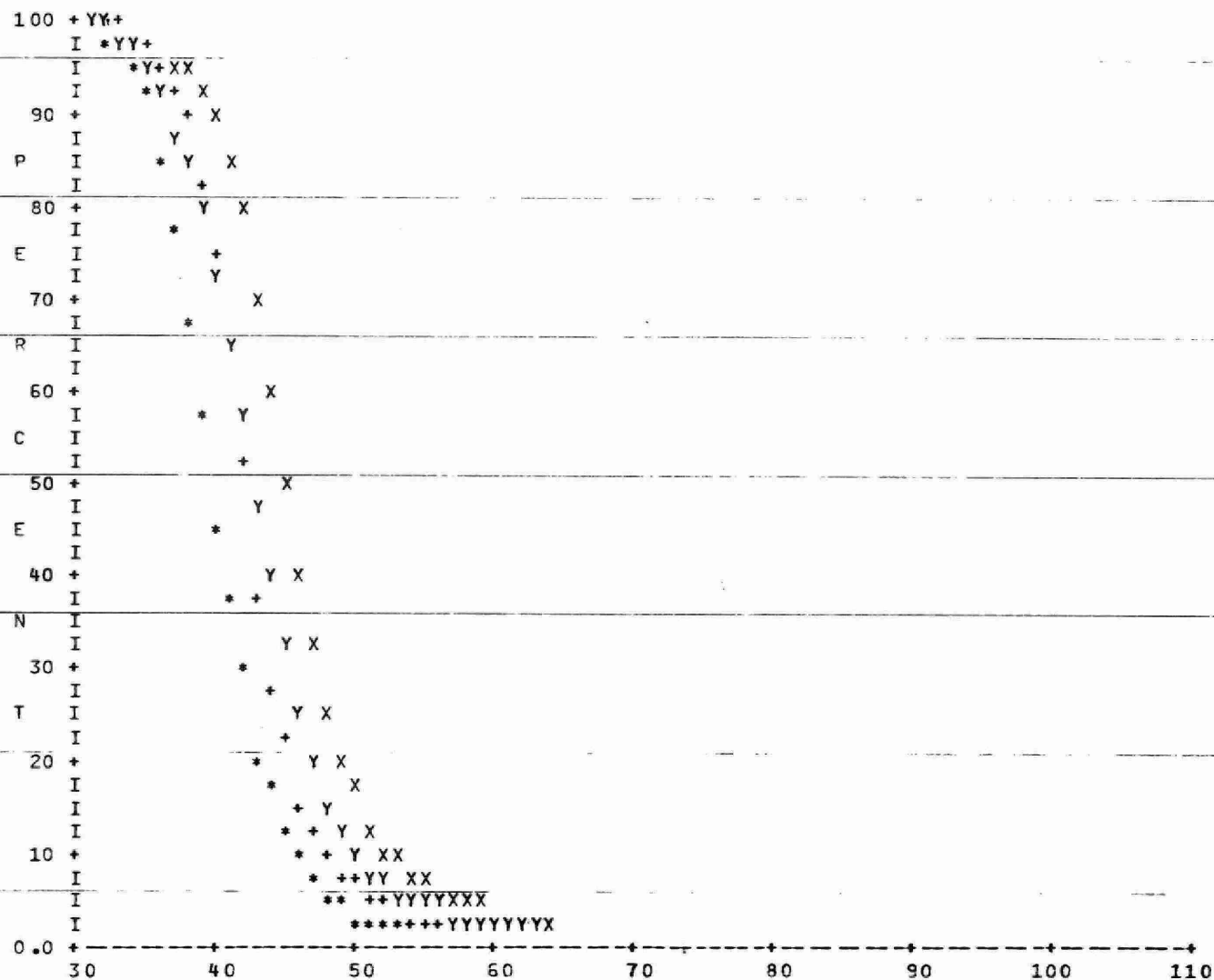


PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
DATE AND LOCATION CODE 10MG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

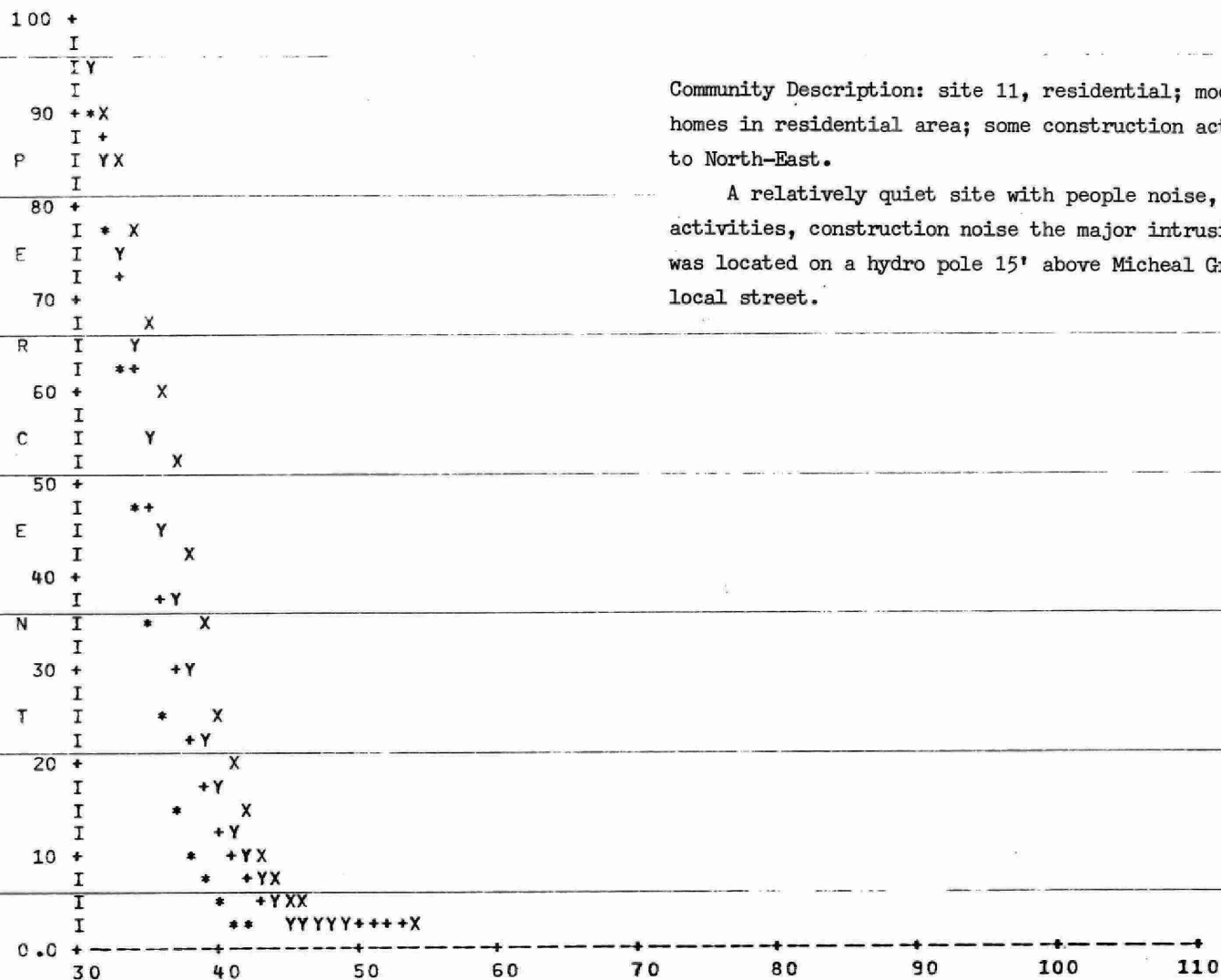
DATE AND LOCATION CODE 10T63



A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 11F63



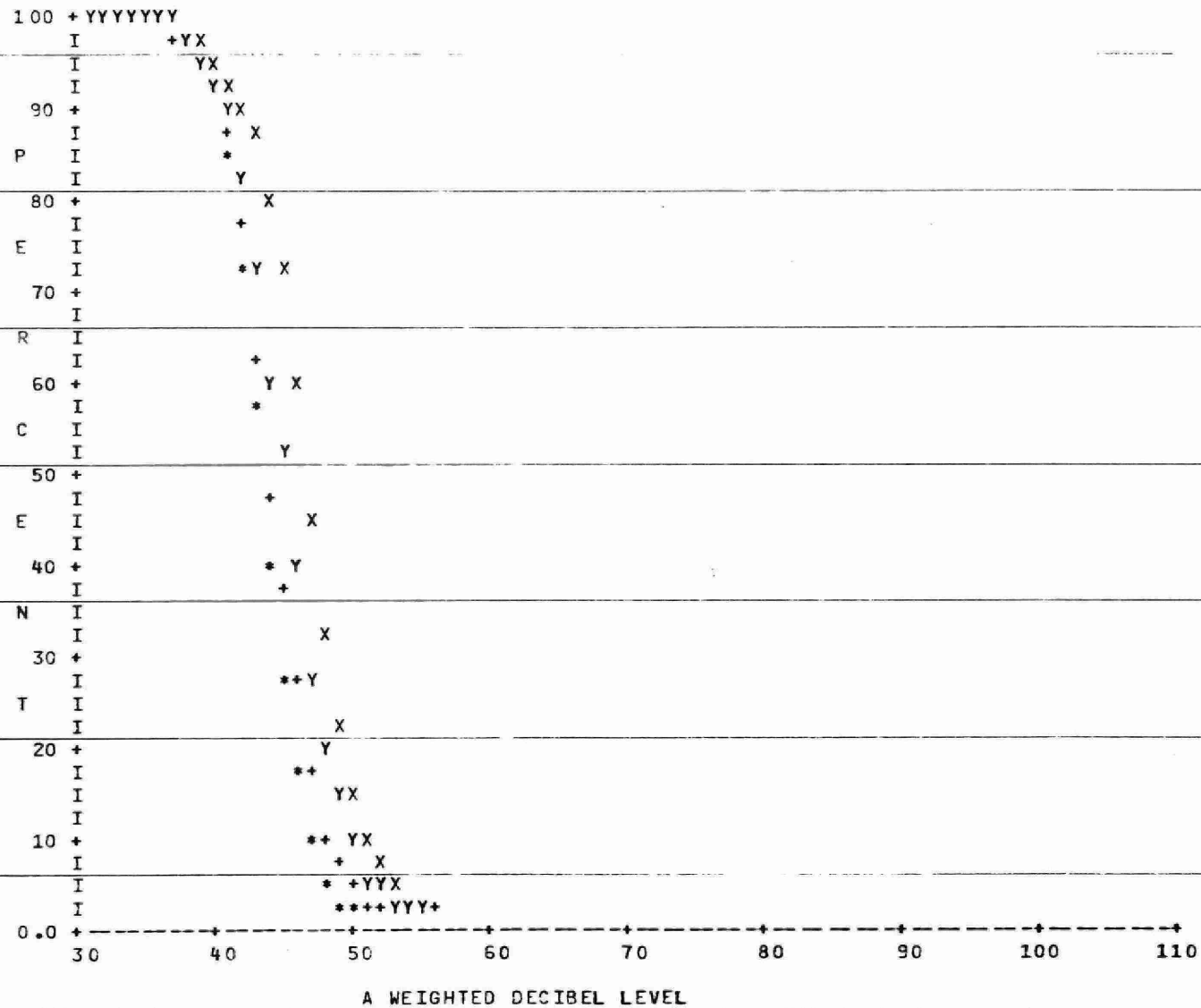
Community Description: site 11, residential; modern single family homes in residential area; some construction activity noted 600' to North-East.

A relatively quiet site with people noise, residential activities, construction noise the major intrusions. The monitor was located on a hydro pole 15' above Micheal Grass Crescent, a local street.

A WEIGHTED DECIBEL LEVEL

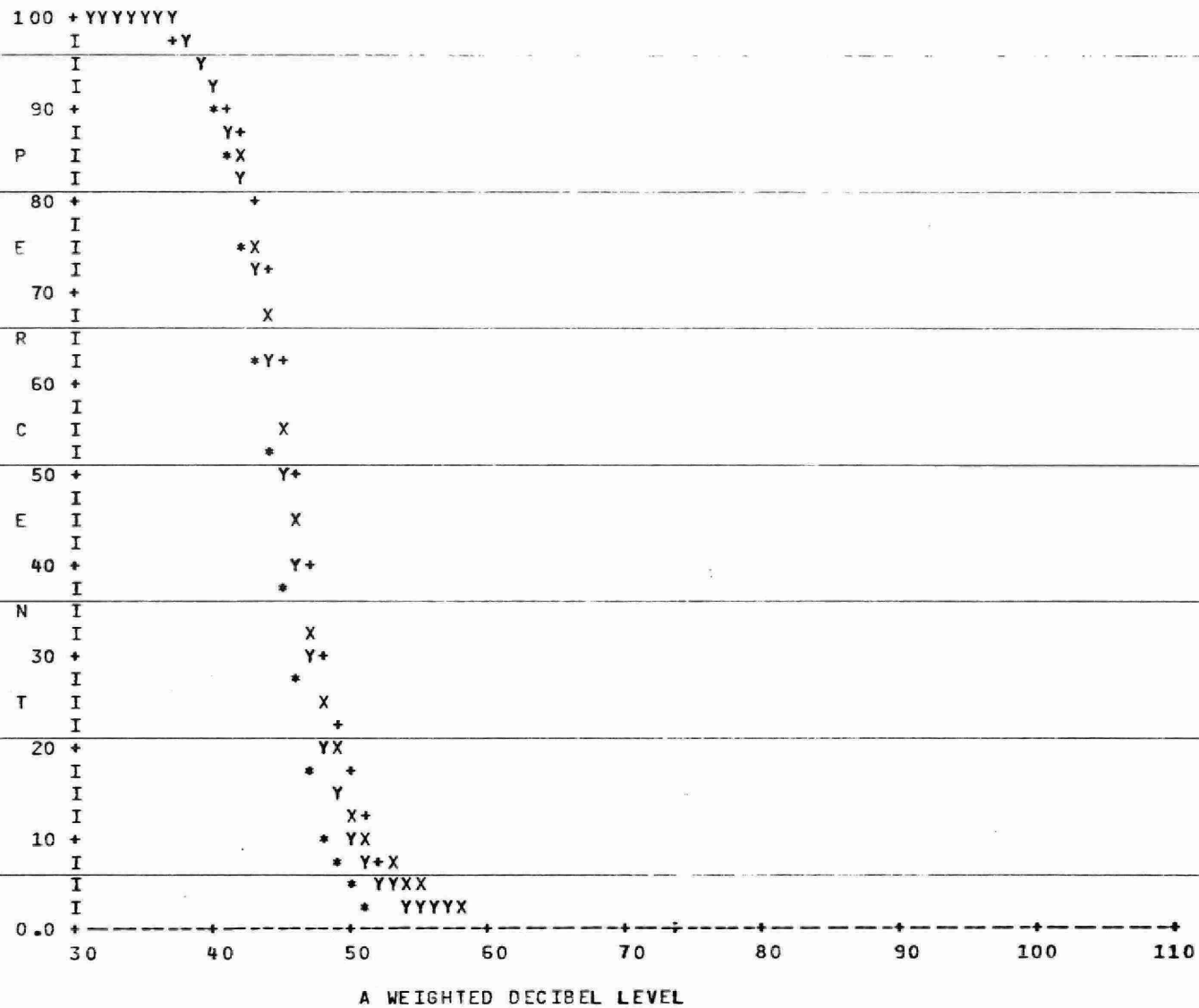
PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 11AW3



PERCENTAGE TIME D9A LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 11UG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 11MW3

PERIOD L₁ L₁₀ L₅₀ L₉₀ TNI L_{EQ} SIGMA NPL

110 +	11p.m.-7a.m.	52	46	42	38	39.5	44.1	3.6	53.3
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I	7a.m.-7p.m.	56	49	44	39	48.5	51.9	4.3	63.0
I									
100 +	7p.m.-11p.m.	63	52	43	39	60.5	58.0	5.9	73.1
I									
I	24 hour	58	49	43	39	48.5	52.8	4.5	64.3

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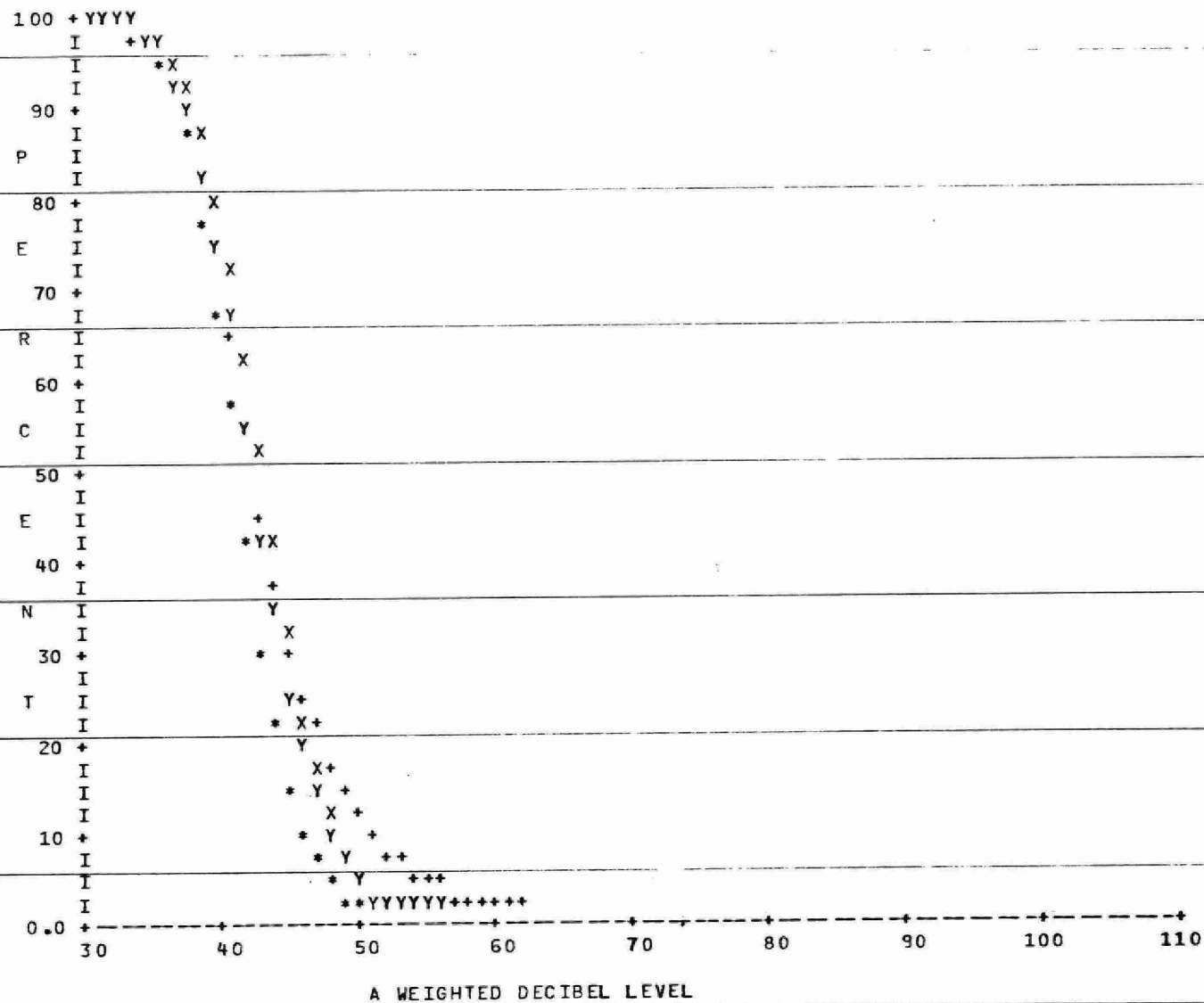
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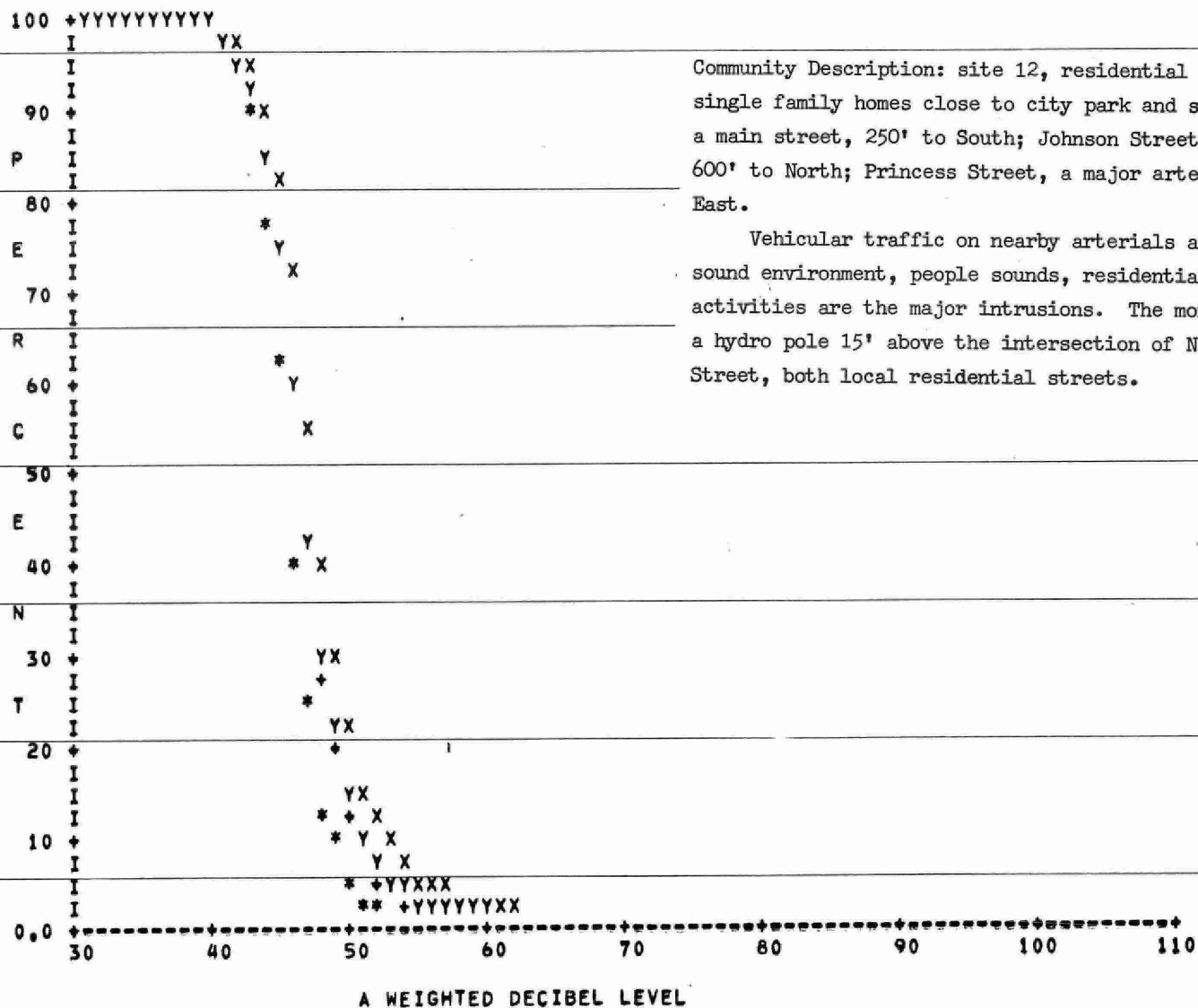
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 11MW3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

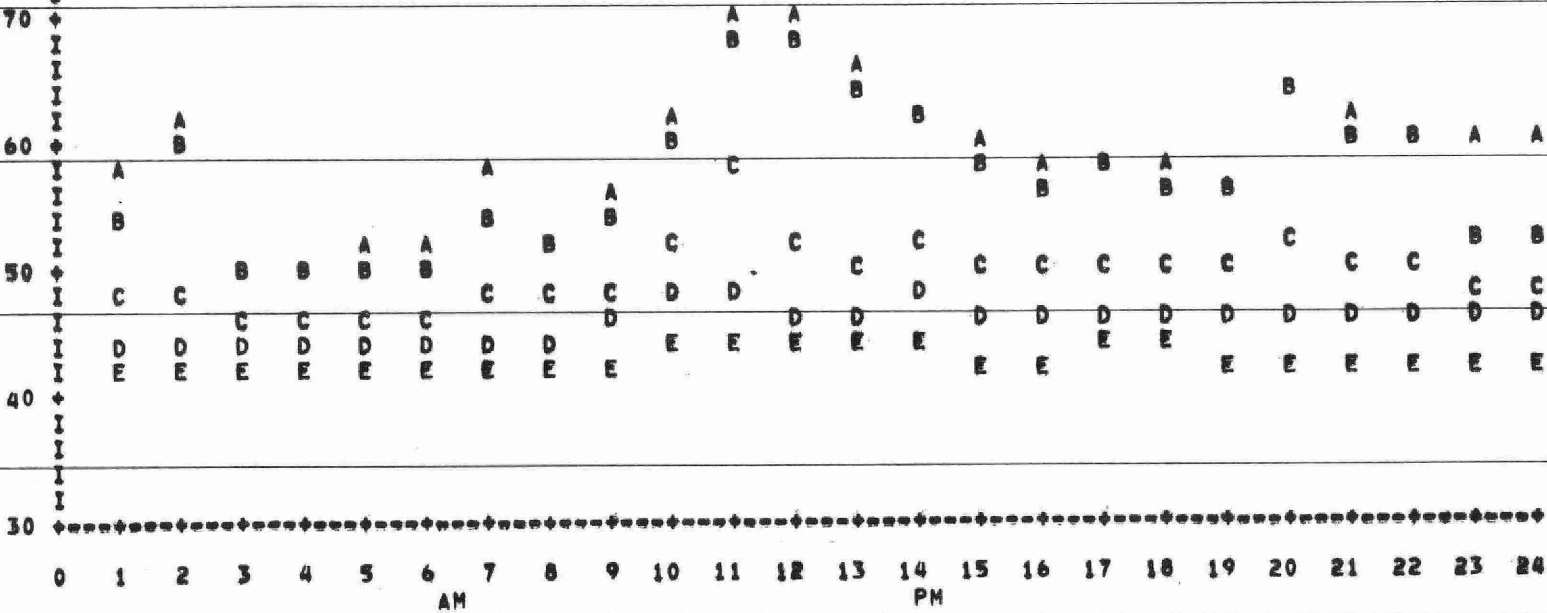
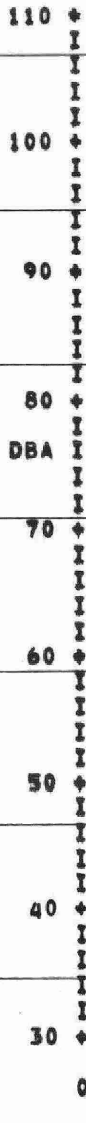
DATE AND LOCATION CODE 12FG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 12AG4

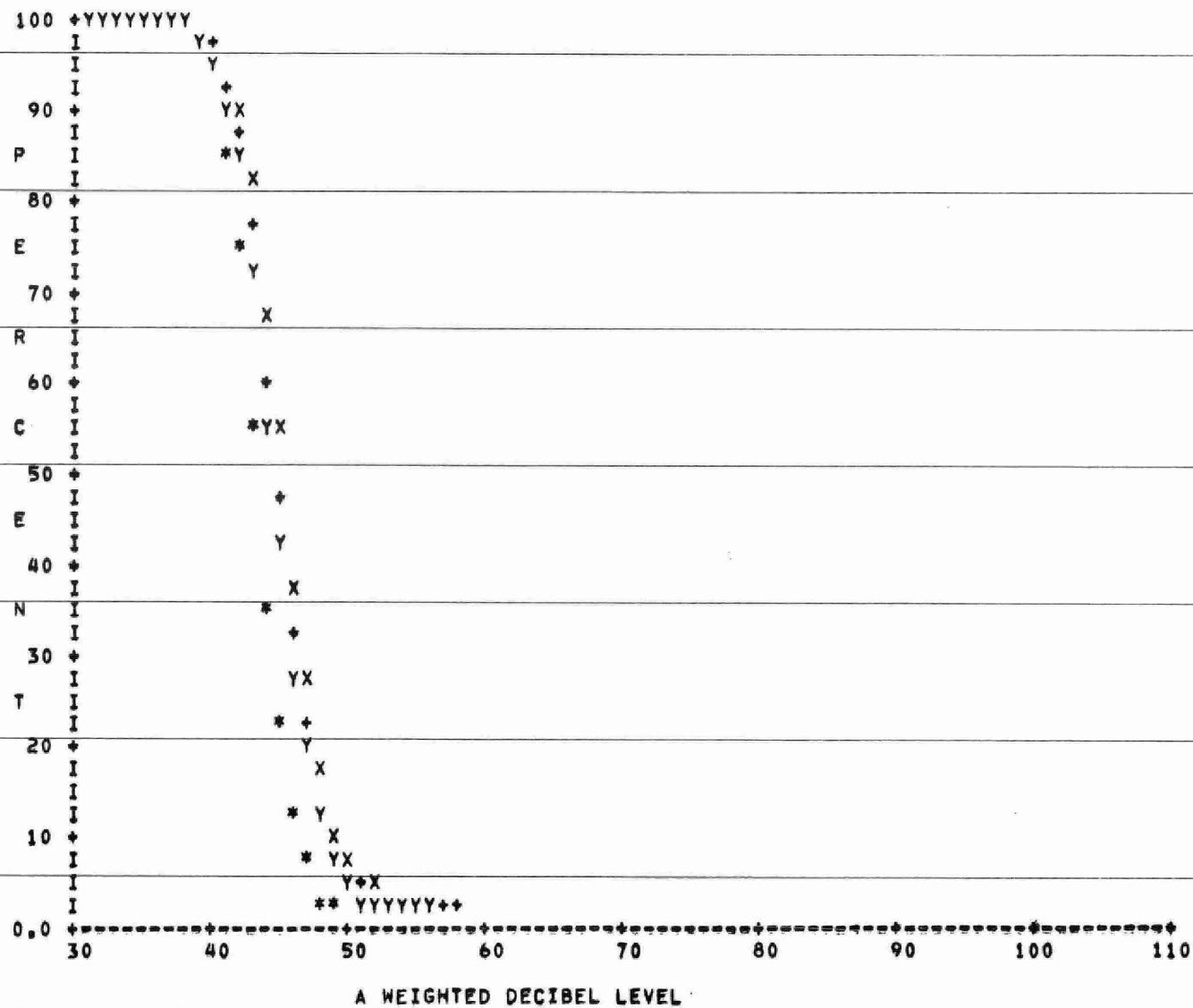
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{BQ}	SIGMA	N
11p.m.-7a.m.	50	47	44	41	34.5	44.9	2.4	51.1
7a.m.-7p.m.	60	50	46	42	43.5	49.0	3.6	58.3
7p.m.-11p.m.	60	49	45	42	39.5	48.0	3.4	56.8
24 hour	58	49	45	42	39.5	47.8	3.4	56.5



HOUR OF DAY

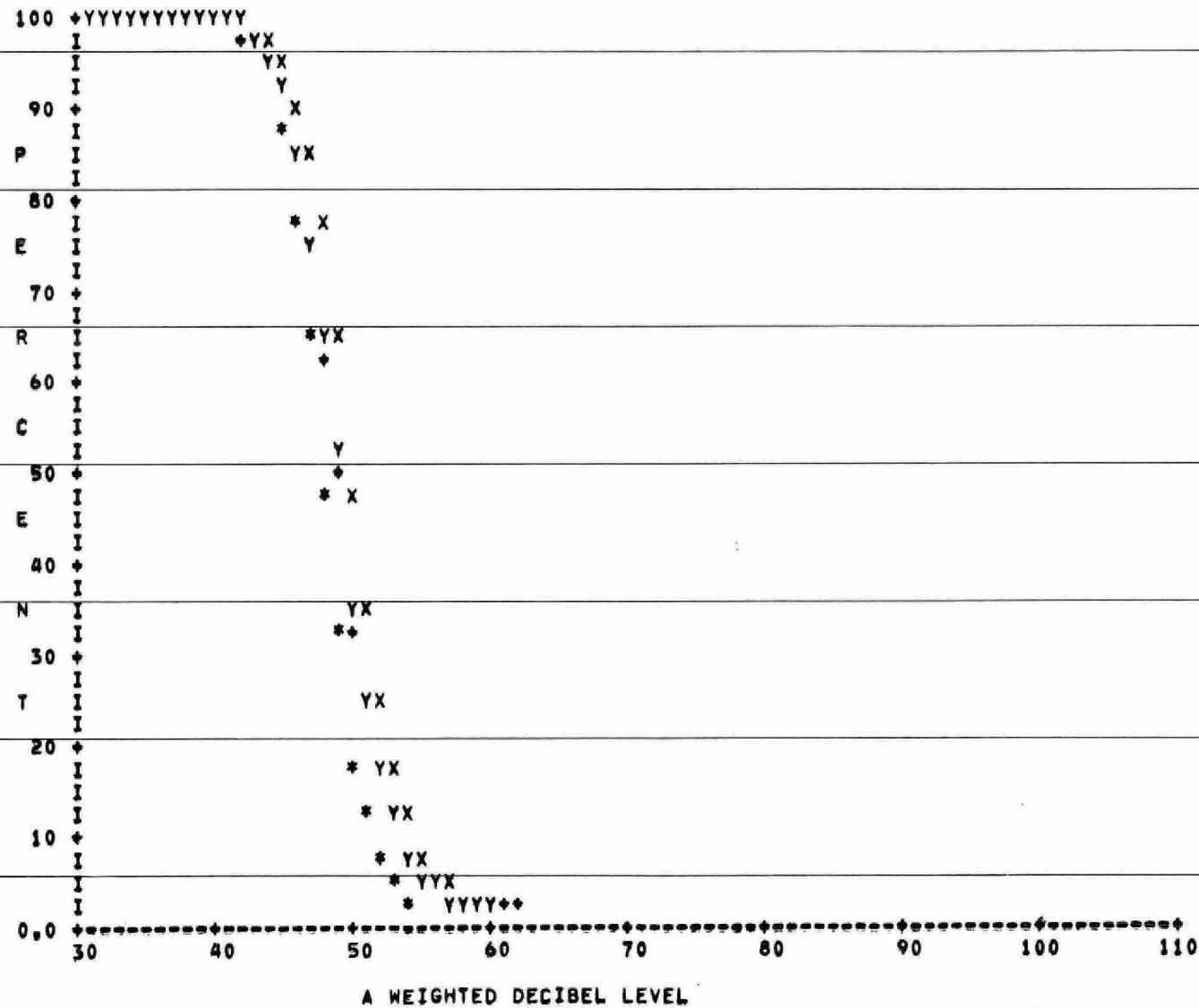
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 12A64

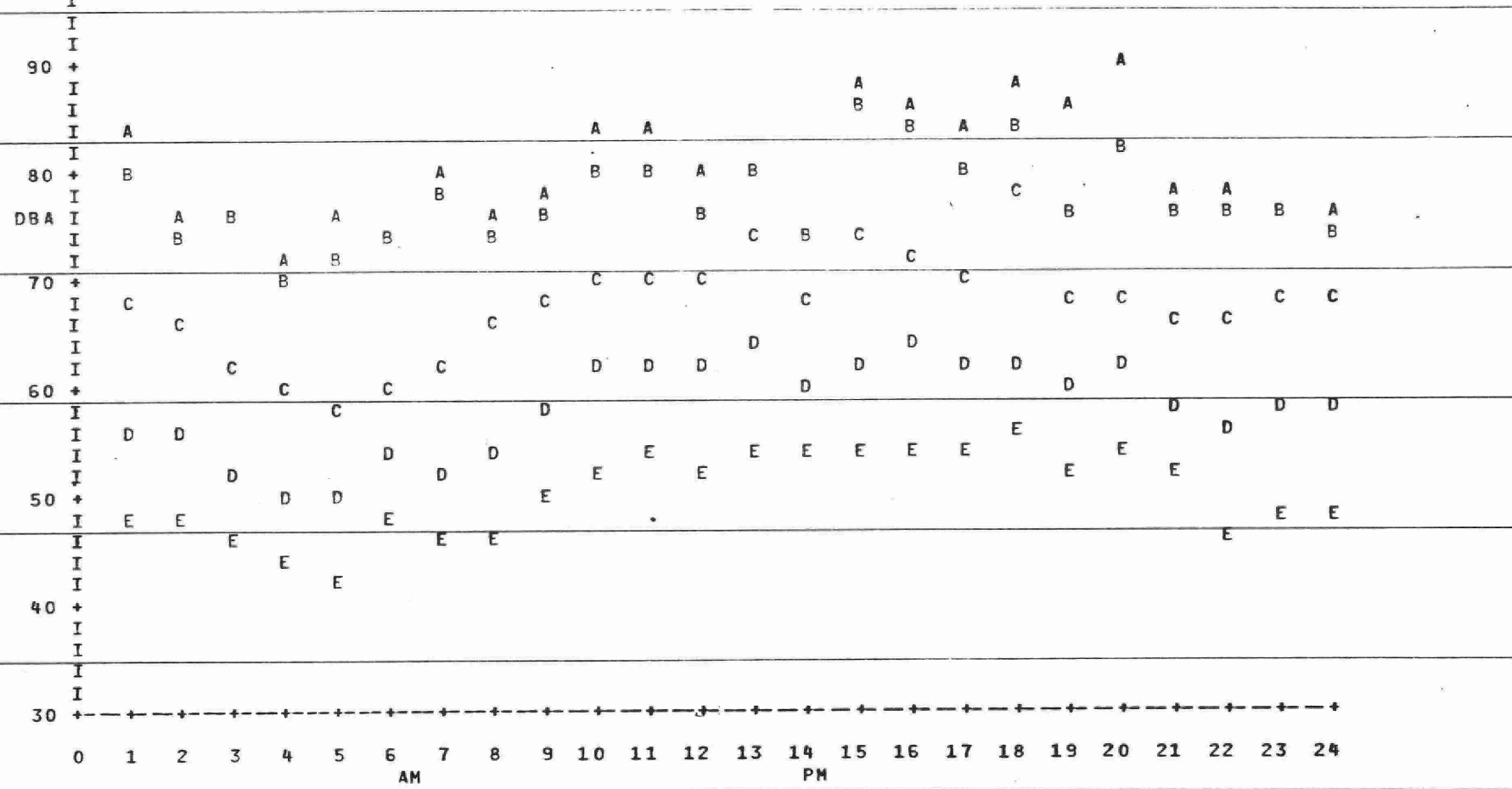


PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 12MG4



110 +	11p.m.-7a.m.	73	64	53	46	87.5	61.3	7.4	80.3
I	7a.m.-7p.m.	80	70	61	50	99.5	67.8	8.0	88.2
I	7p.m.-11p.m.	76	67	58	49	90.5	65.4	7.6	84.9
I	24 hour	78	68	58	47	100.5	66.1	8.3	87.3



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 13FW3

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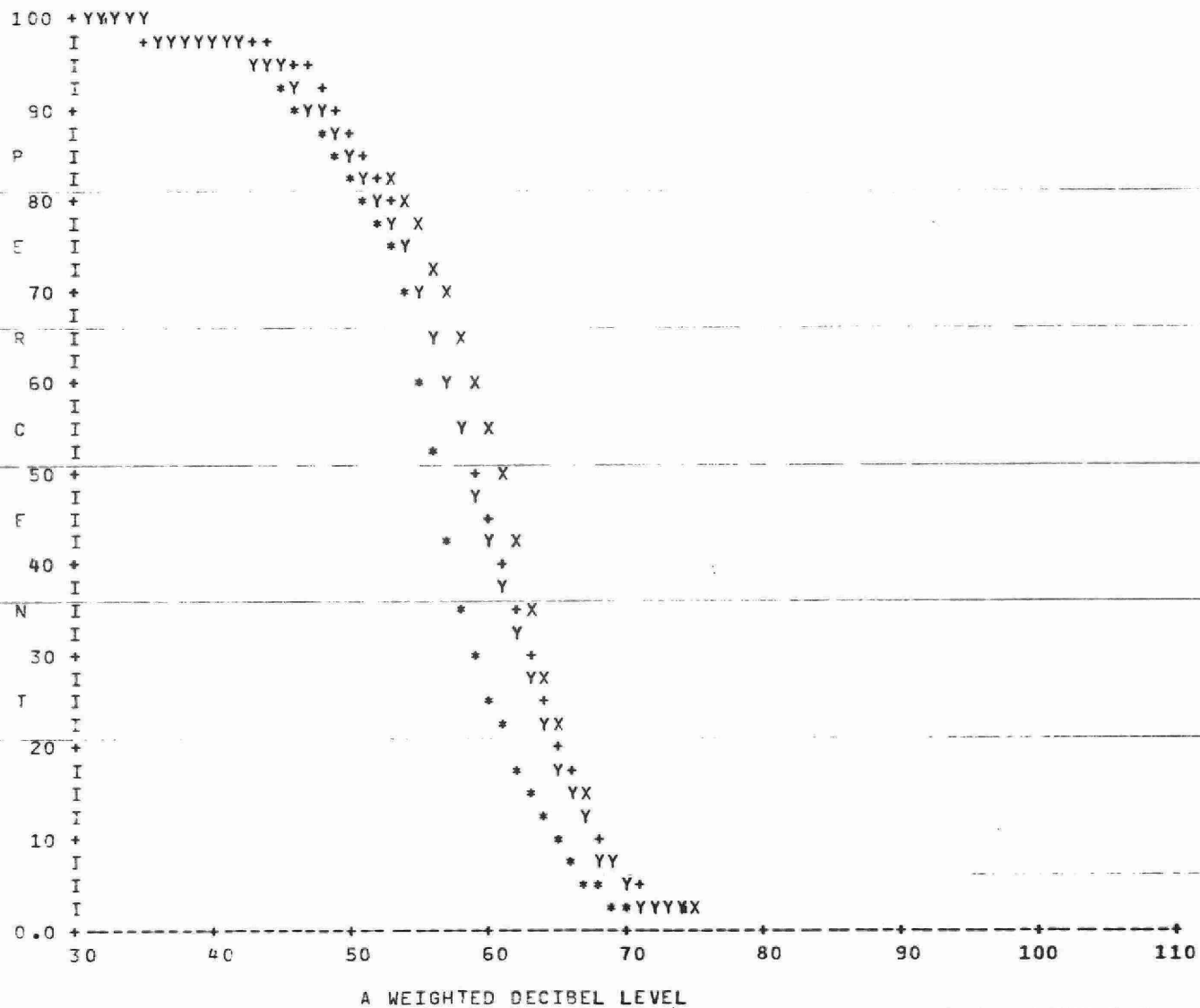
Community Description: site 13, commercial; small shops and commercial establishments in downtown core; Clergy Street approx. 200' to West.

Vehicular traffic noise, people sounds and commercial activity dominate the sound environment. The monitor was situated on a hydro pole 15' above Princess Street, a major arterial.

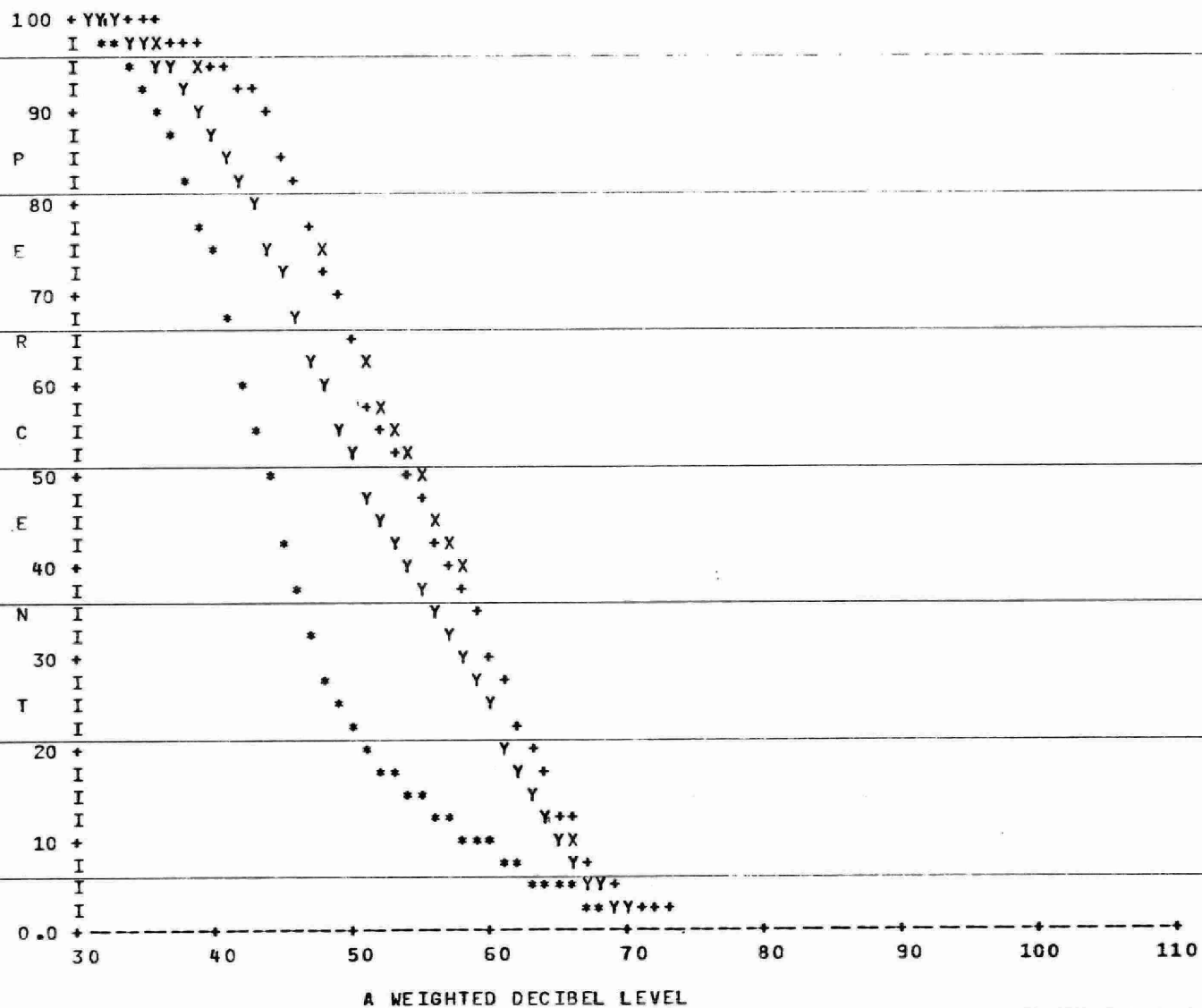
A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 13AG3

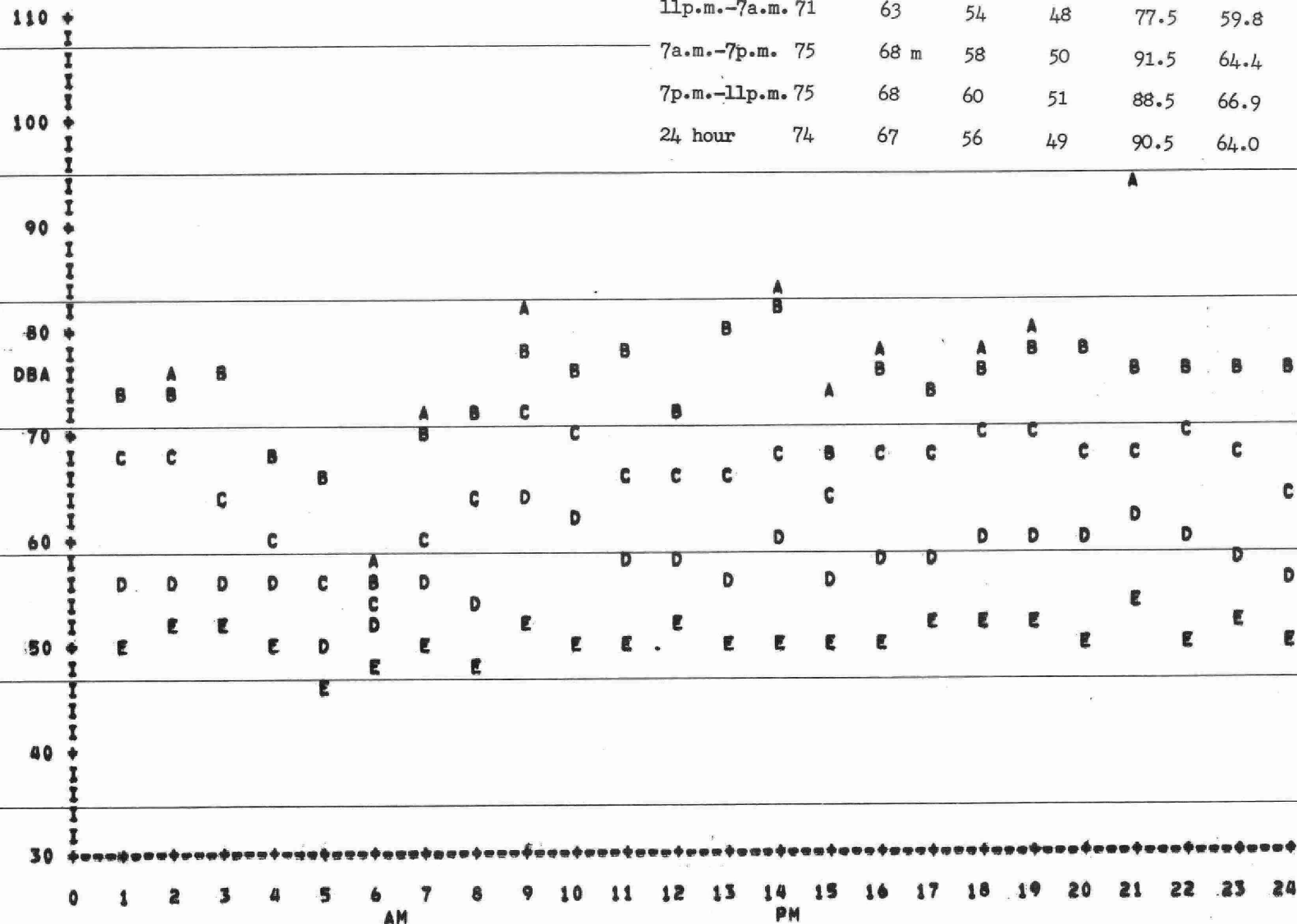


DATE AND LOCATION CODE 13UG3



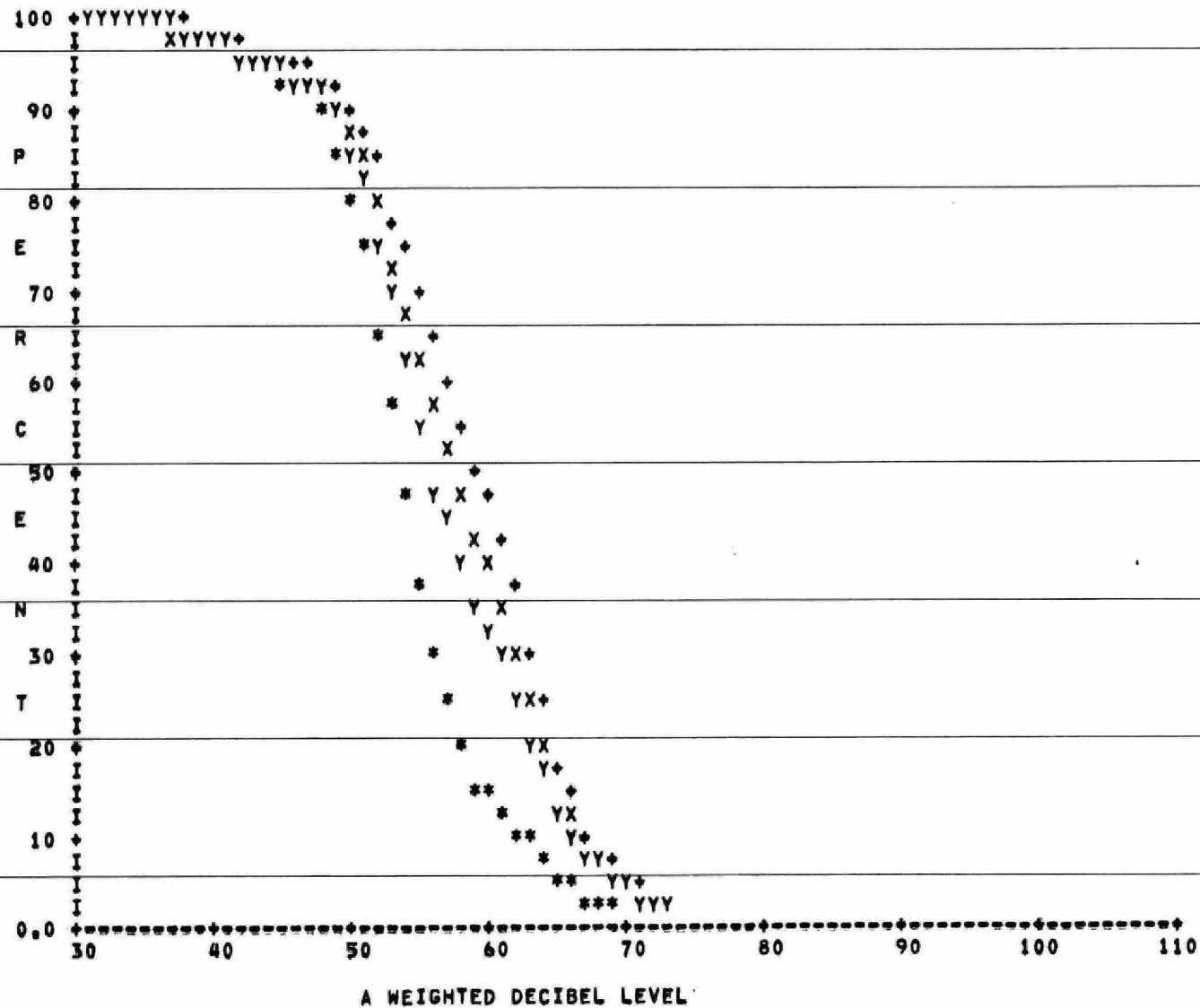
24 HOUR NOISE CLIMATE
DATE AND LOCATION CODE 13M63

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m. 71		63	54	48	77.5	59.8	6.2	75.7
7a.m.-7p.m. 75		68 m	58	50	91.5	64.4	7.8	
7p.m.-11p.m. 75		68	60	51	88.5	66.9	7.5	
24 hour	74	67	56	49	90.5	64.0	7.5	



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED
DATE AND LOCATION CODE 13M63



DATE AND LOCATION CODE

14FW5

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PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 14FW5

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A WEIGHTED DECIBEL LEVEL

Community Description: site 14, residential commercial industrial; older single family homes adjacent to industrial and commercial establishments; Wellington Street approx. 100' to West; Dominion Store and parking lot 100' to South-West; C.N.R. and C.P.R. yards 50' to North and West.

General industrial sound dominates at the site, trains, whistles parking lot activity, people sound, commercial and residential activities sounds are significant intrusions. The monitor was situated on a hydro pole 15' above Place D'Armes, a busy street.

DATE AND LOCATION CODE 14AG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 14UG3

PERIOD L₁ L₁₀ L₅₀ L₉₀ TNI L_{EQ} SIGMA NPT

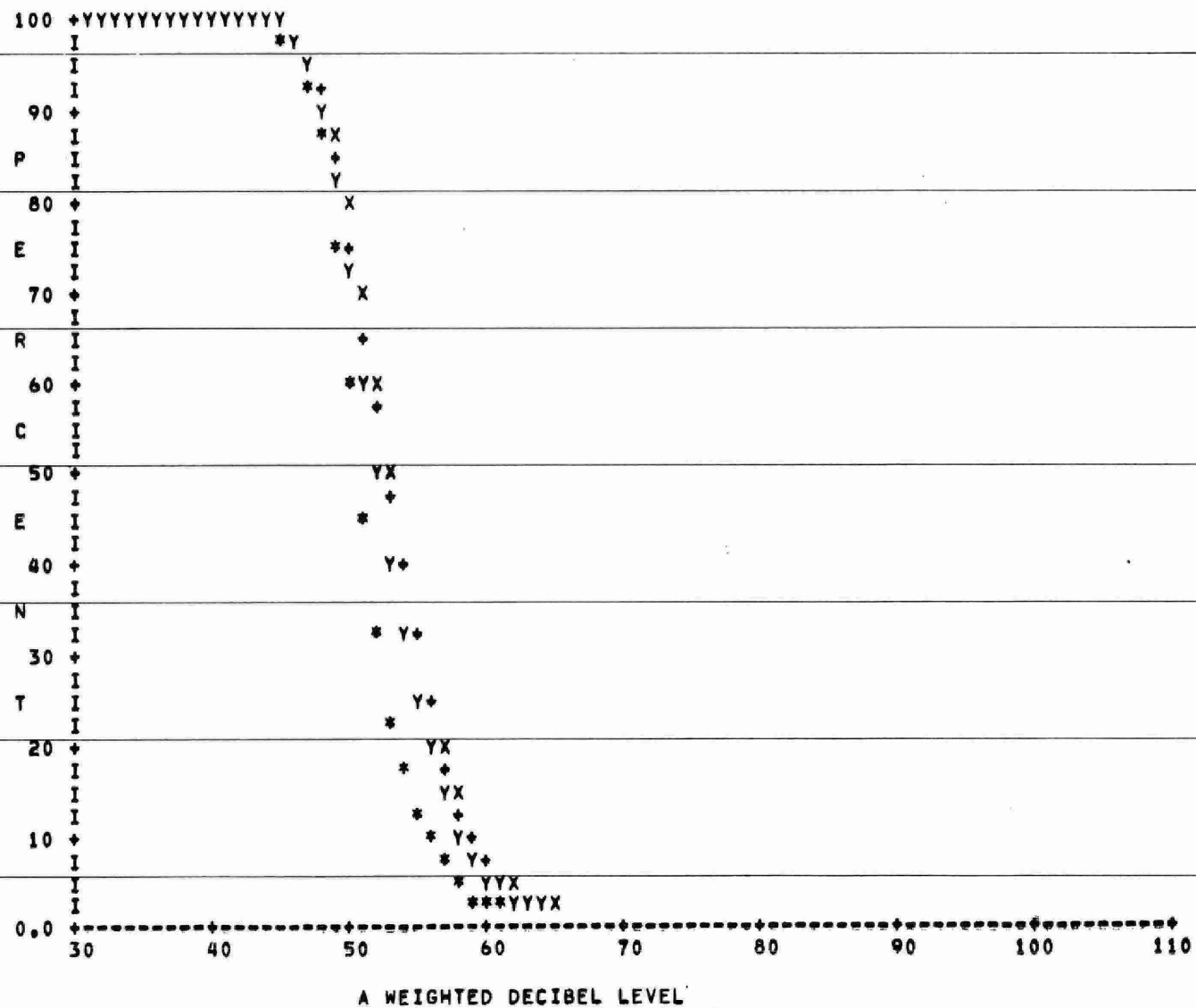
110 +	11p.m.-7a.m.	63	56	51	48	49.5	53.5	3.5	62.4
I	7a.m.-7p.m.	67	60	53	49	62.5	58.1	4.5	69.6
I	7p.m.-11p.m.	64	60	53	49	62.5	56.1	4.2	66.8
I	24 hour	65	59	52	49	58.5	56.7	4.3	67.6
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 14UG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

14MG4

PERIOD

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7a.m.-7p.m. 73 62 56 49 70.5 61.0 5.5 75.1

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7p.m.-11p.m. 63 58 51 46 63.5 54.2 4.4 65.5

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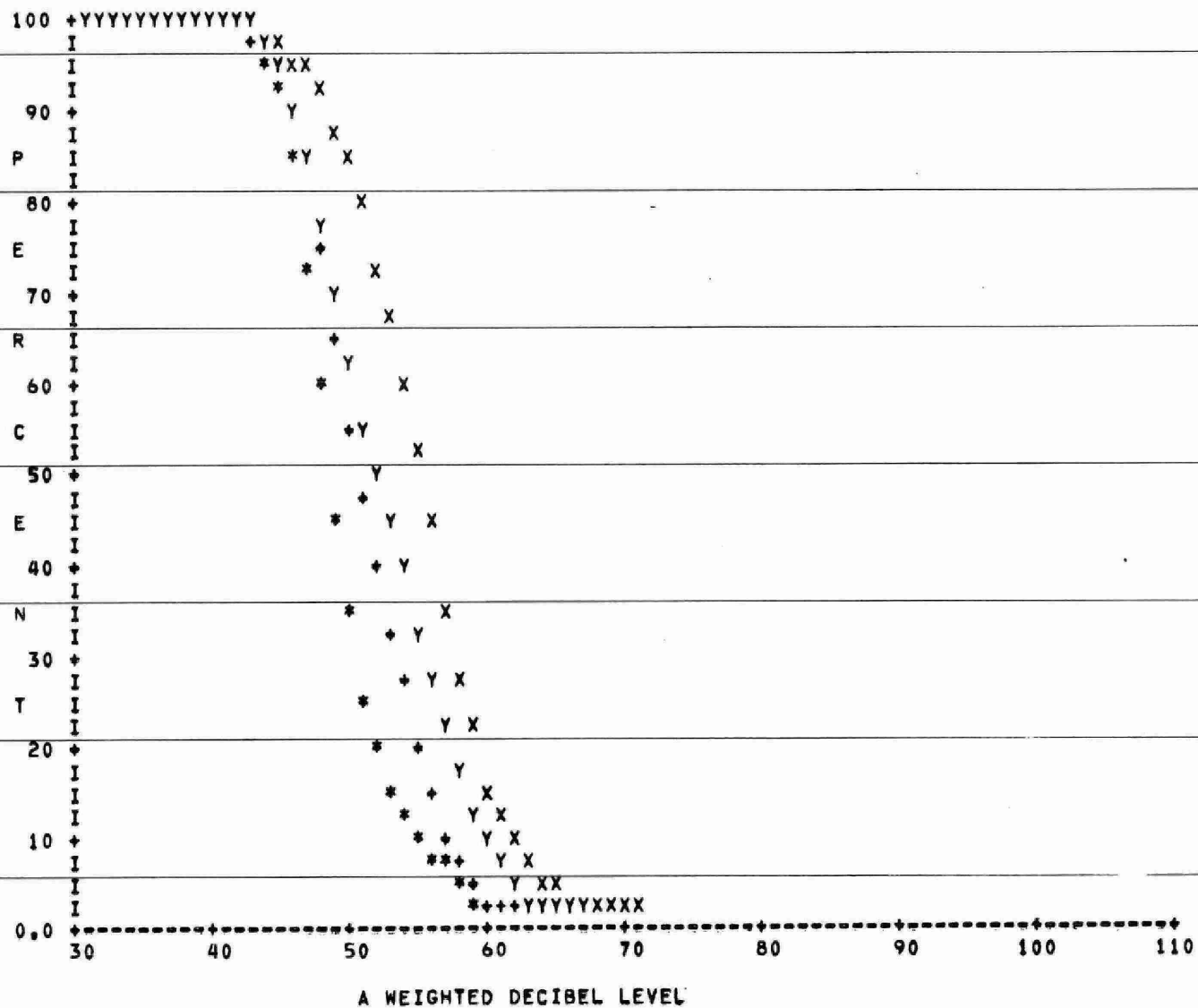
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

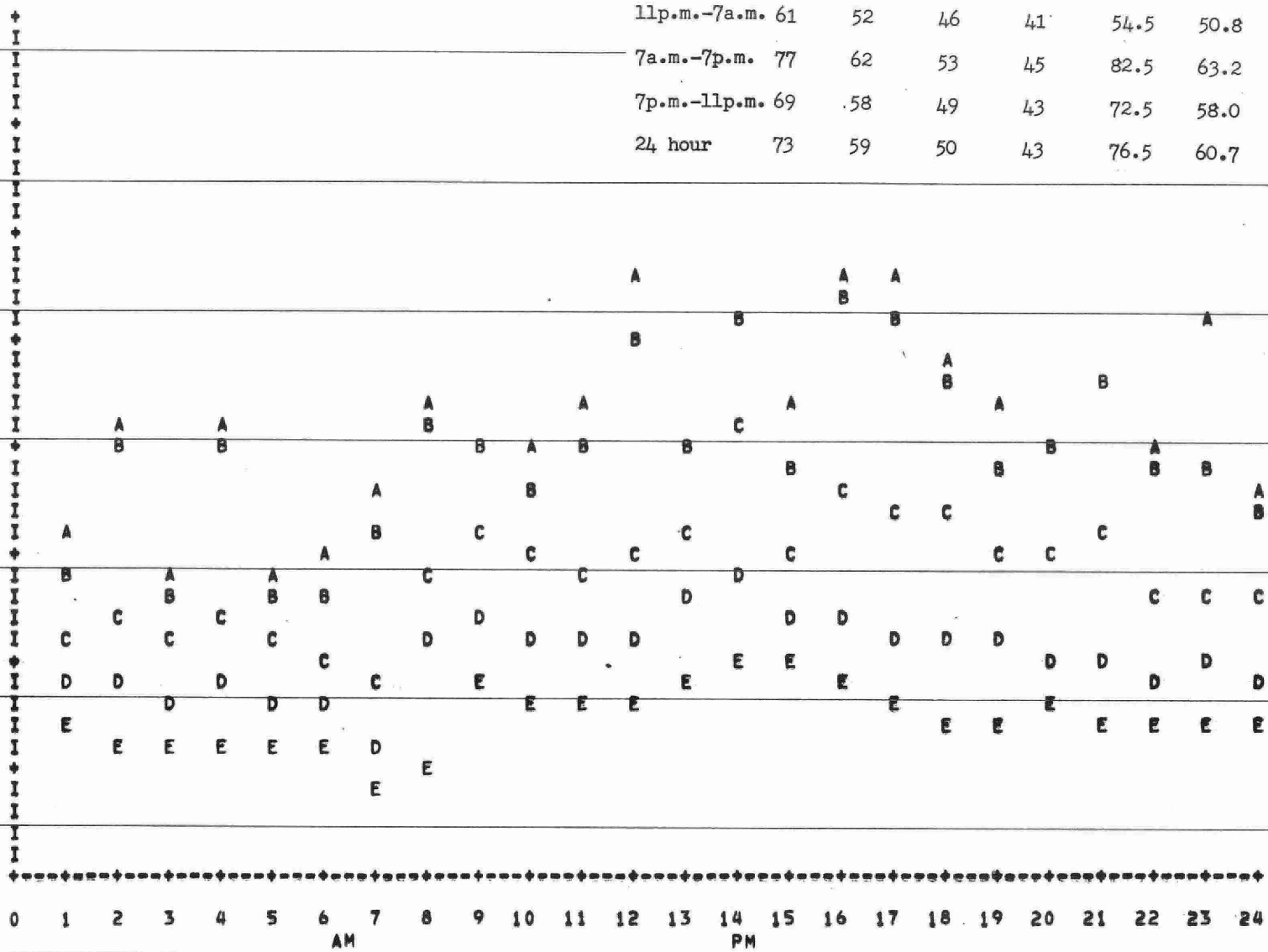
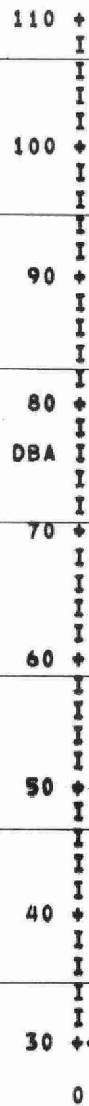
DATE AND LOCATION CODE 14MG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 15FG3

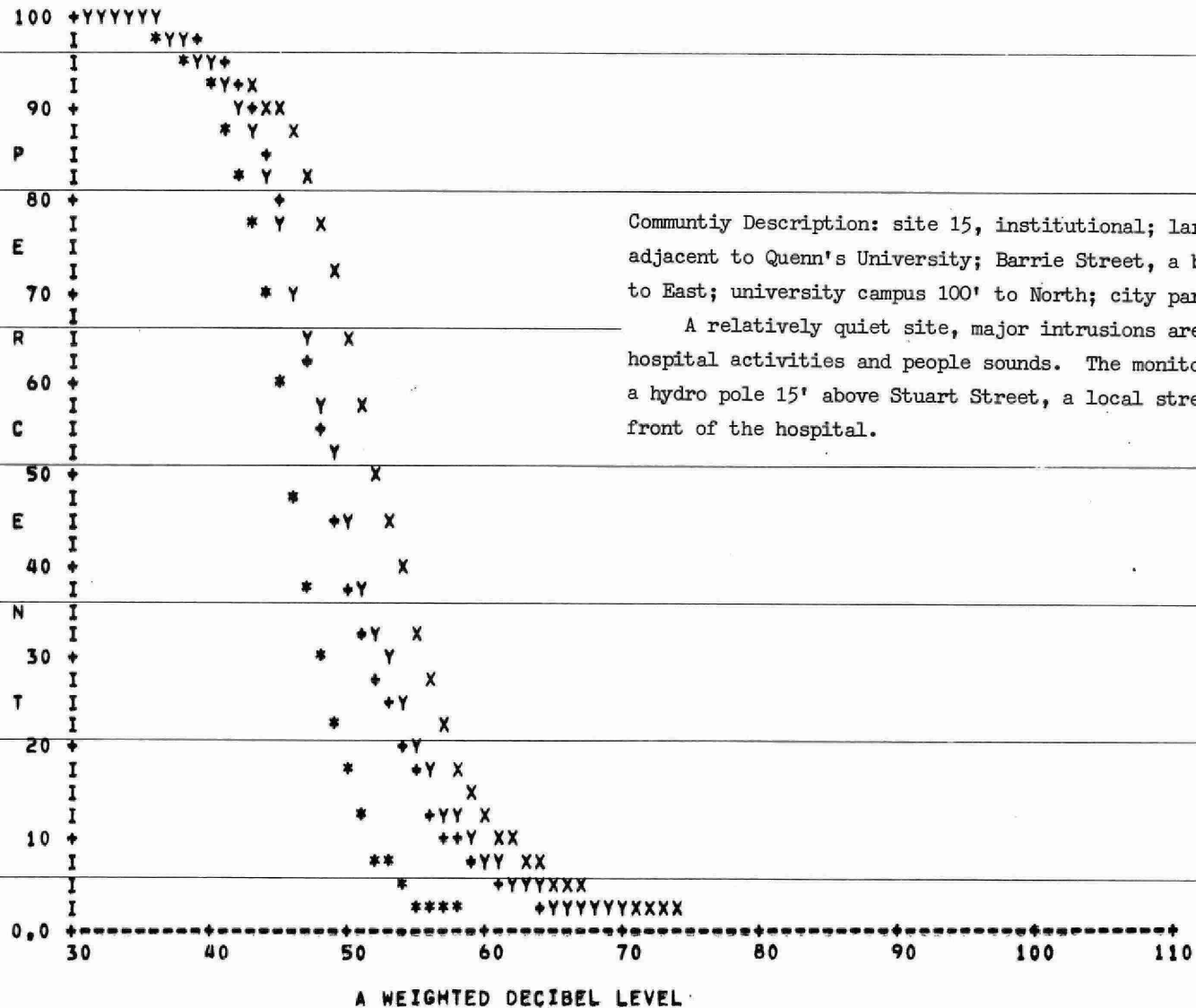
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPI
11p.m.-7a.m.	61	52	46	41	54.5	50.8	4.7	62.9
7a.m.-7p.m.	77	62	53	45	82.5	63.2	7.3	81.9
7p.m.-11p.m.	69	58	49	43	72.5	58.0	6.3	74.2
24 hour	73	59	50	43	76.5	60.7	7.1	78.8



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 15FG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 15AG3

PERIOD

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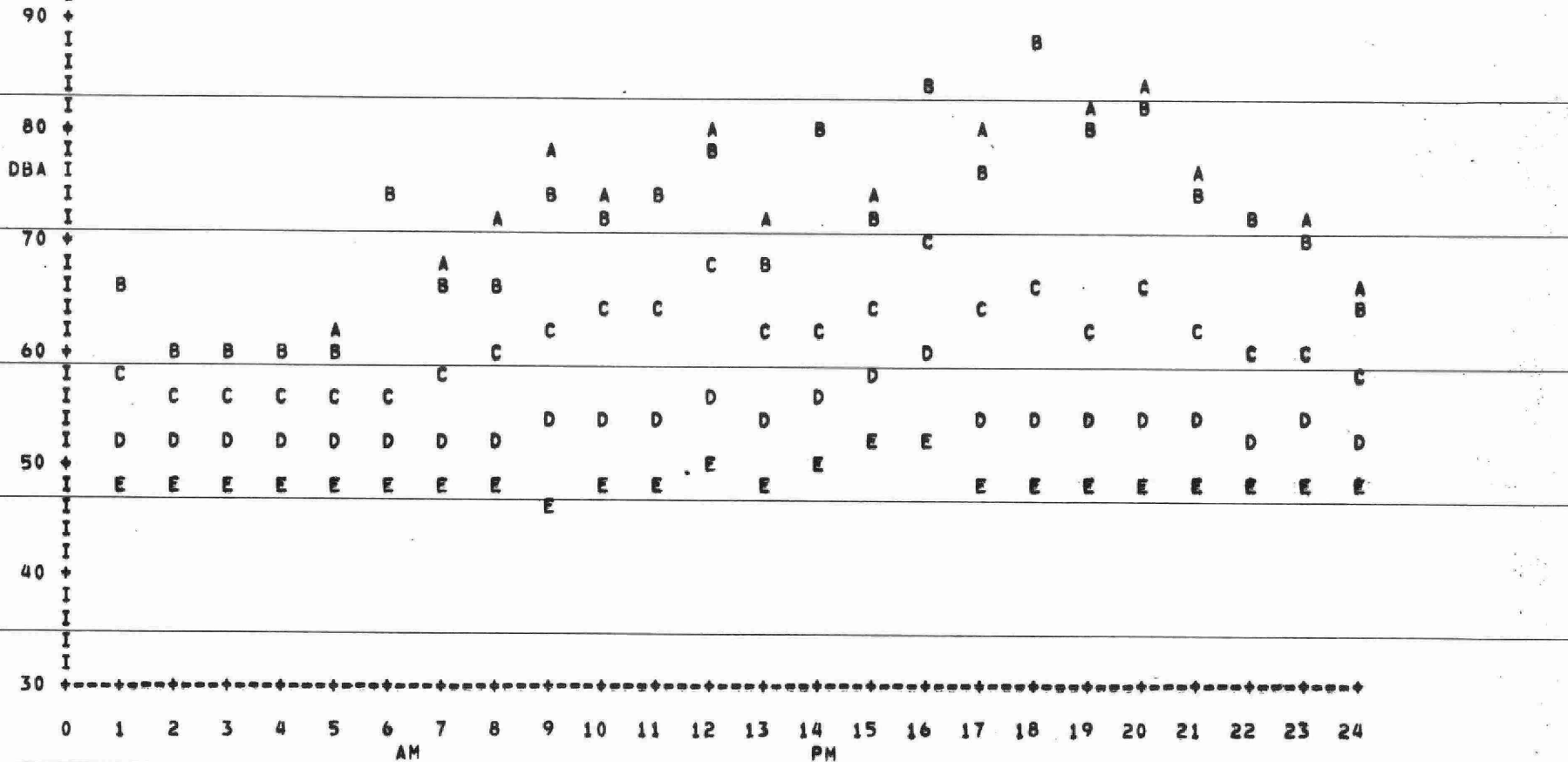
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11p.m.-7a.m.	63	56	52	47	52.5	53.8	3.7	63.4
7a.m.-7p.m.	78	64	54	48	81.5	64.5	6.7	81.7
7p.m.-11p.m.	78	62	53	48	73.5	62.6	6.1	78.3
24 hour	75	61	53	48	69.5	62.6	6.0	77.9

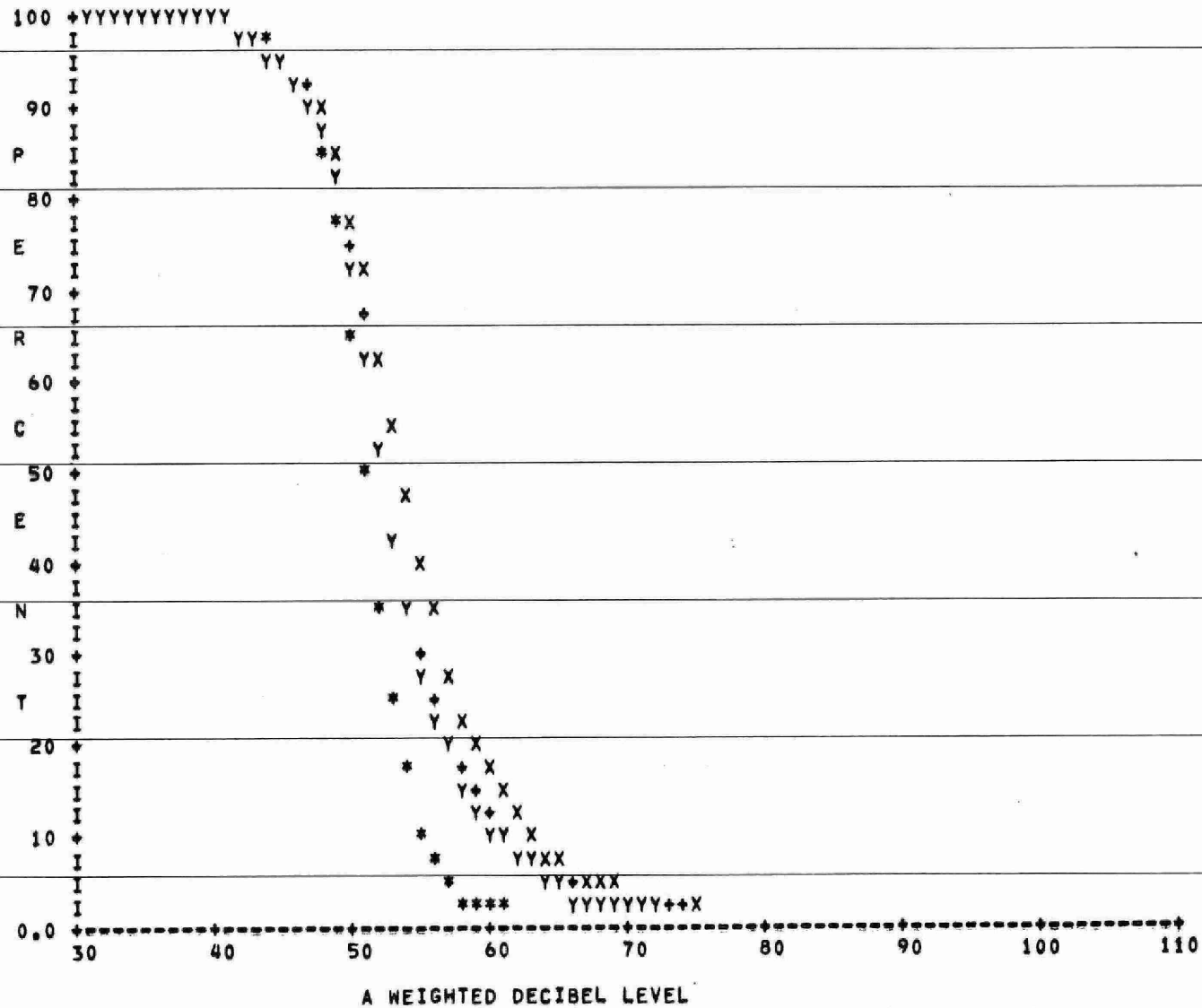


HOUR OF DAY

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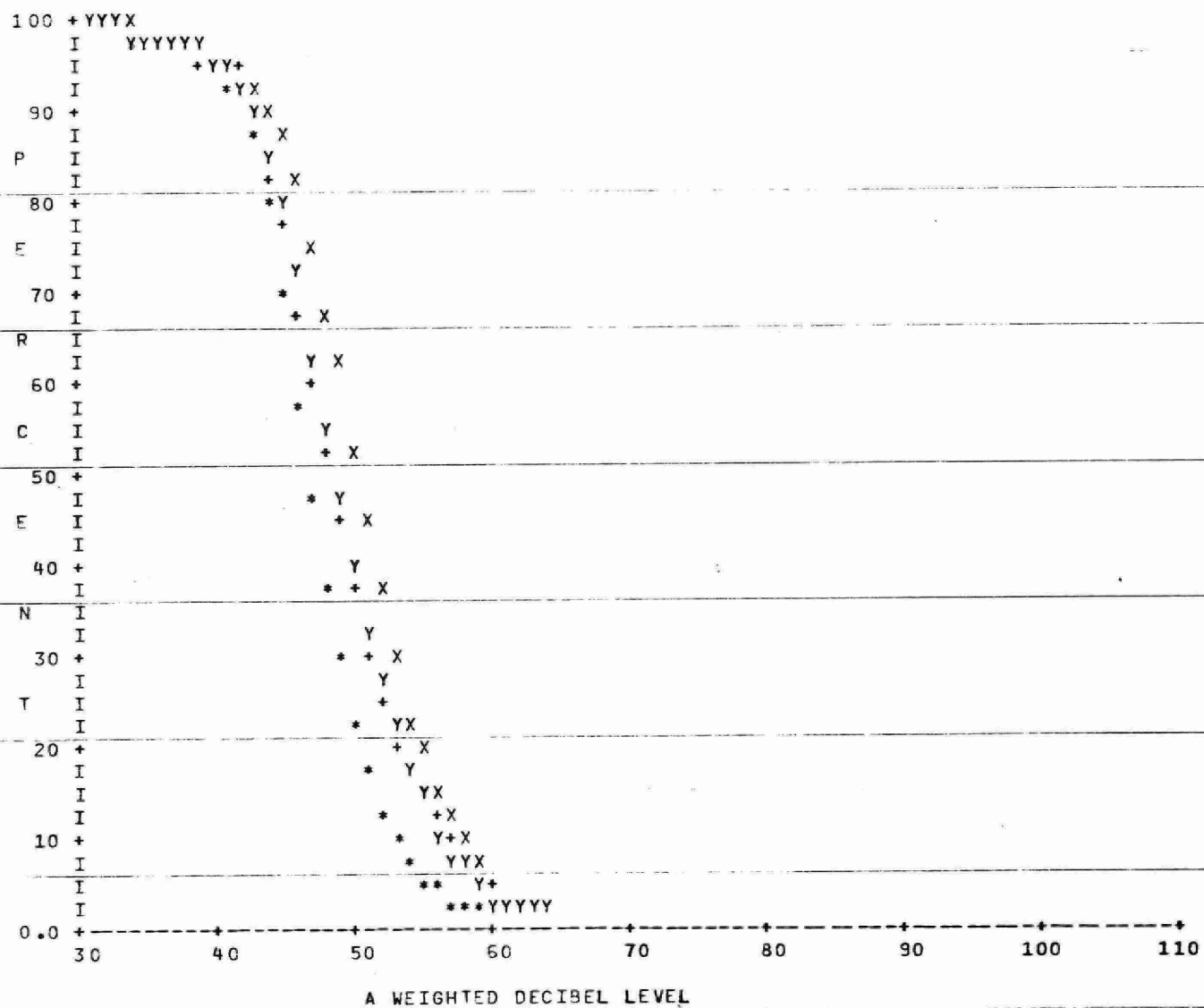
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 15AG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 15UG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

15MG3

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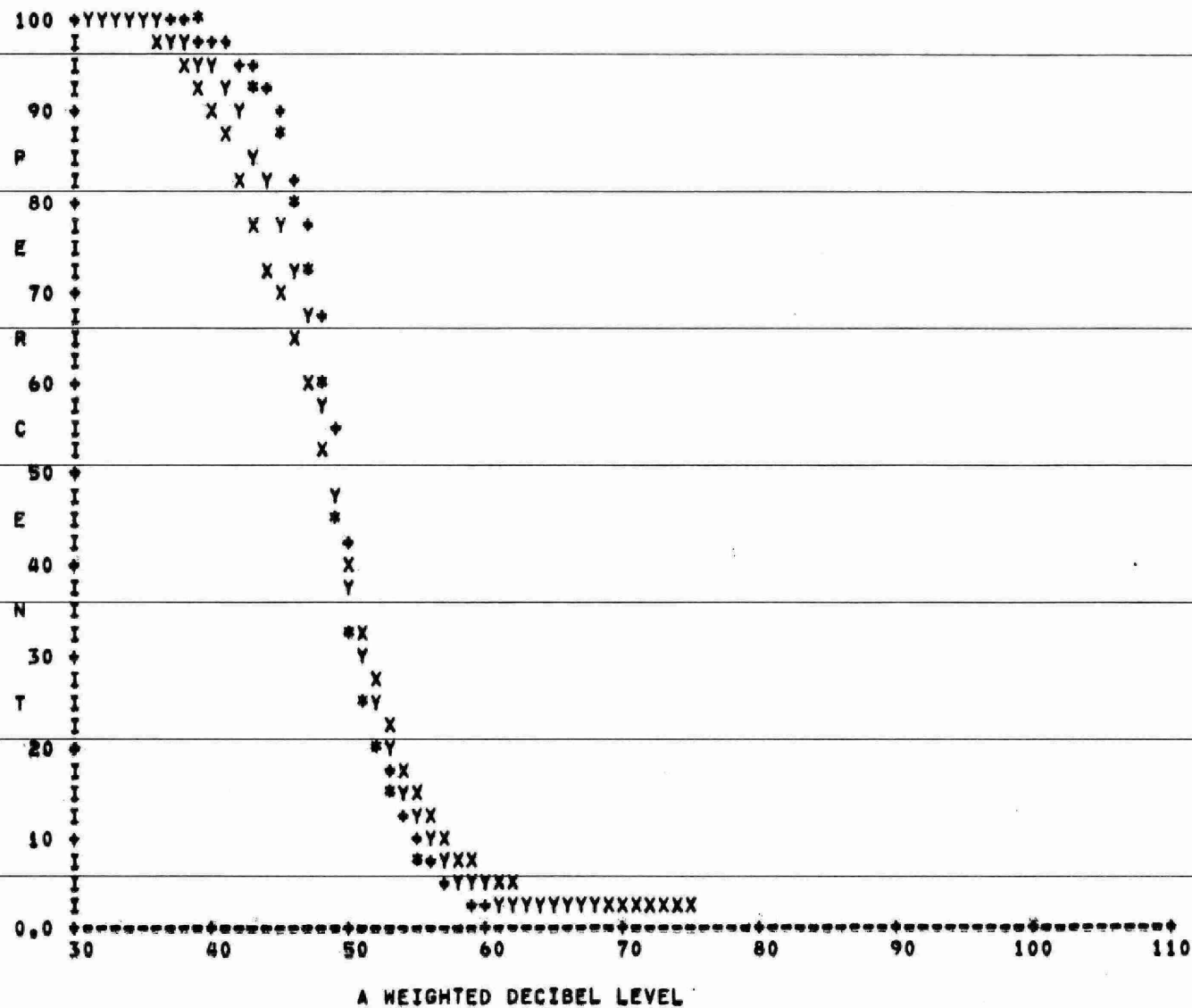
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HOUR OF DAY

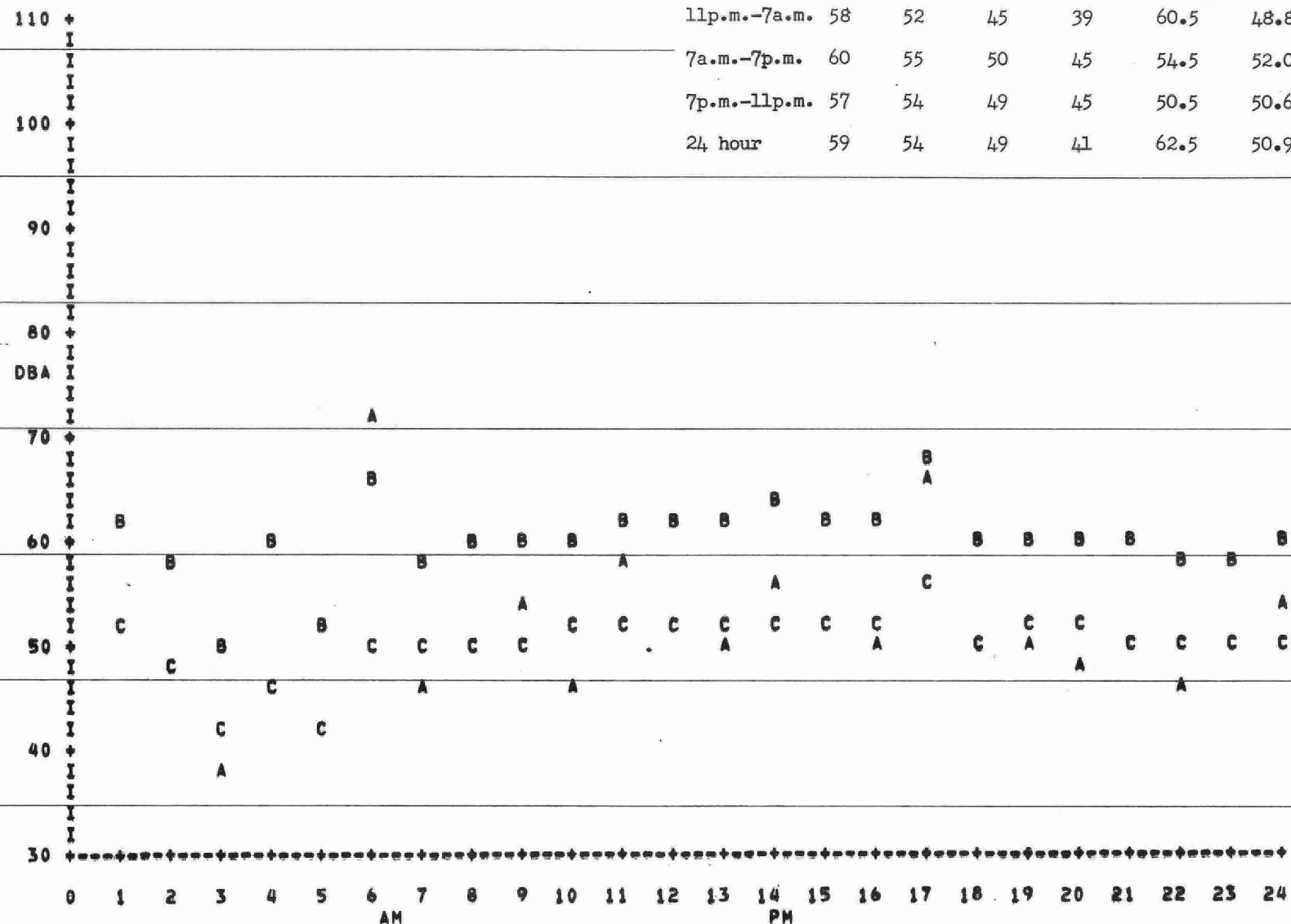
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 15MG3



TNI NPL AND LEQ BY THE HOUR
DATE AND LOCATION CODE 16FG4

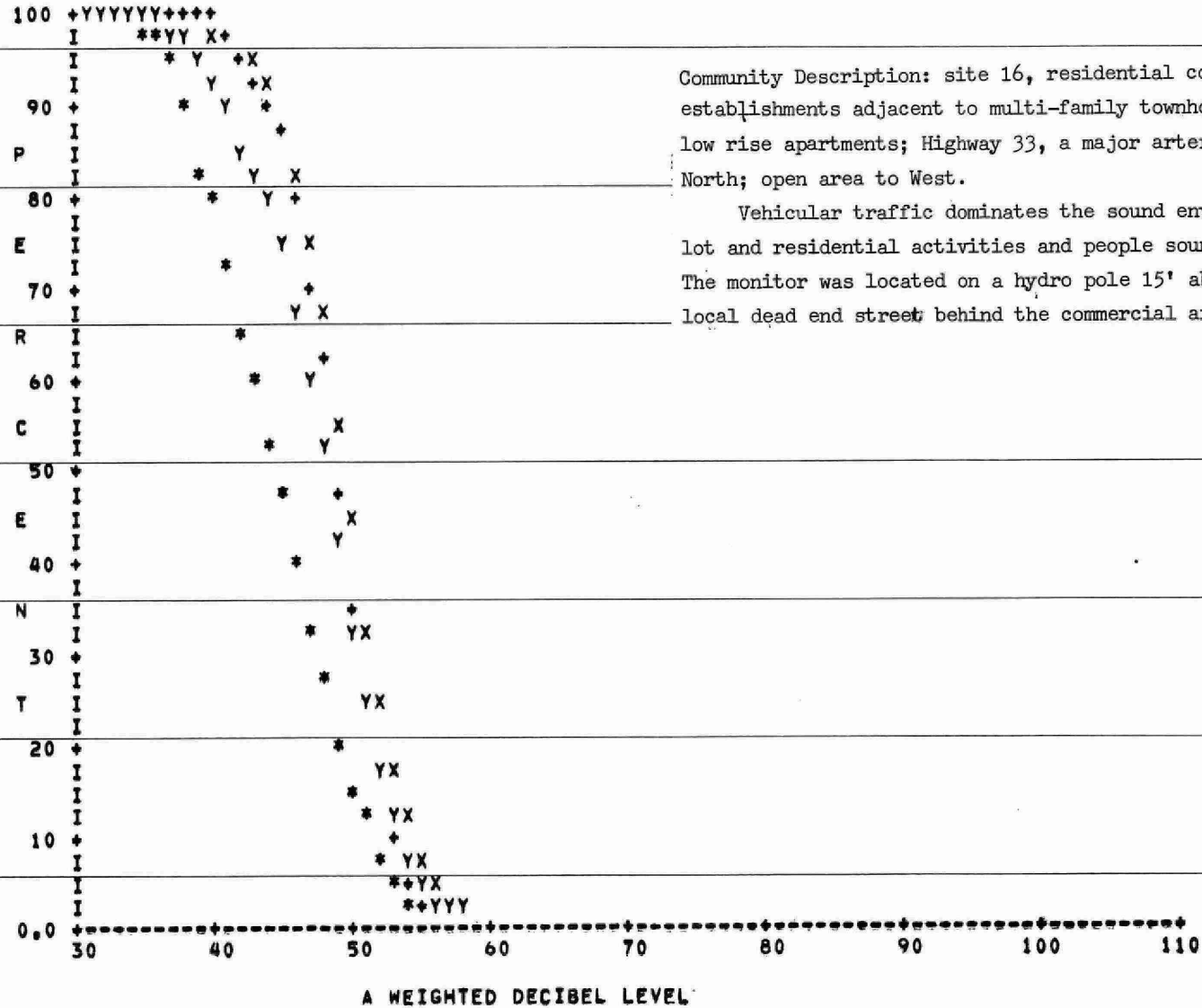
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	58	52	45	39	60.5	48.8	5.3	62.3
7a.m.-7p.m.	60	55	50	45	54.5	52.0	4.0	62.3
7p.m.-11p.m.	57	54	49	45	50.5	50.6	3.5	59.6
24 hour	59	54	49	41	62.5	50.9	4.9	63.5



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 16FG4



Community Description: site 16, residential commercial; commercial establishments adjacent to multi-family townhouse development and low rise apartments; Highway 33, a major arterial, approx. 100' to North; open area to West.

Vehicular traffic dominates the sound environment with parking lot and residential activities and people sounds the major intrusions. The monitor was located on a hydro pole 15' above Bayswater Place, a local dead end street behind the commercial area.

24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

16A64

PERIOD

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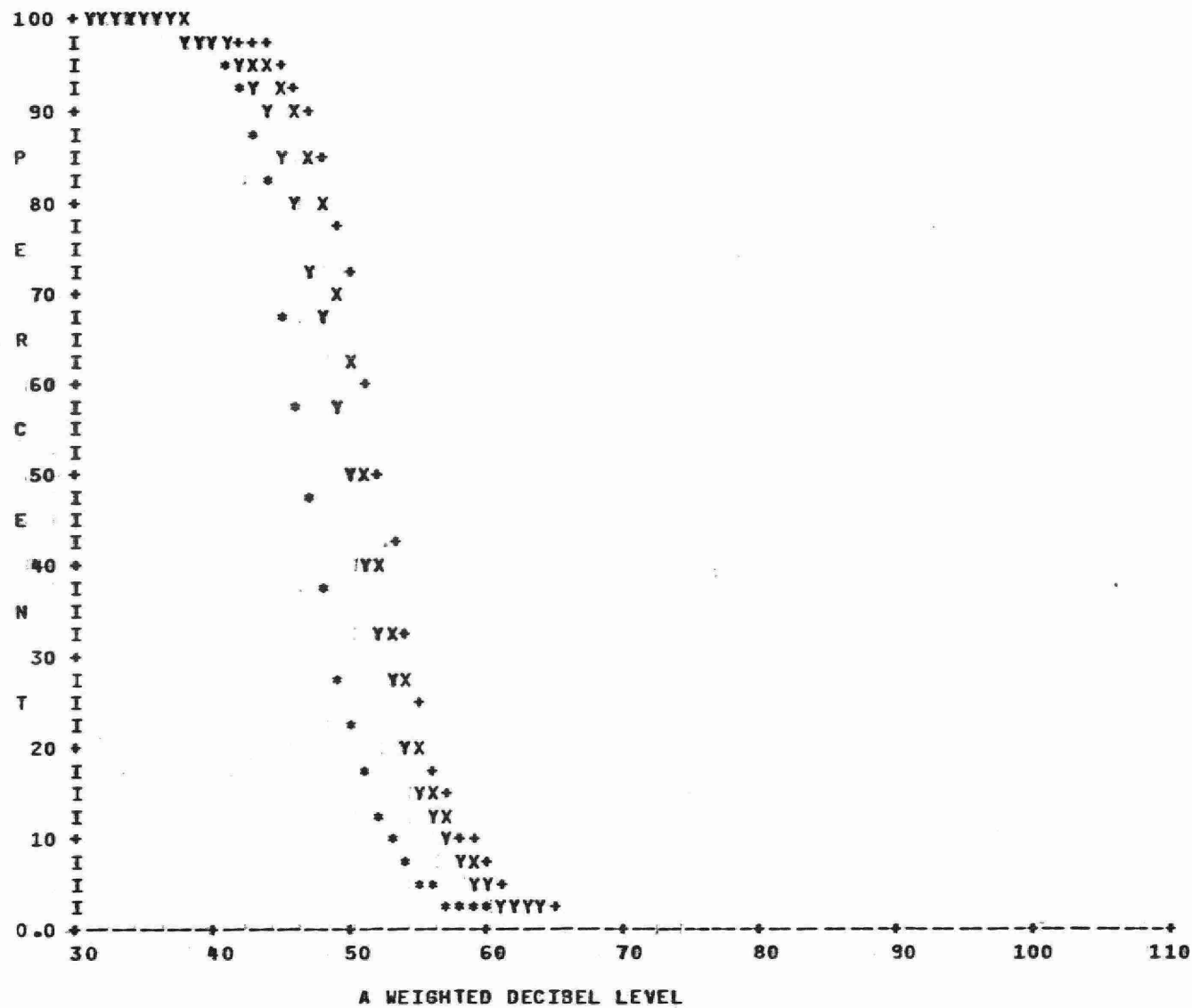
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I		7p.m.-11p.m.	67	59	53	48	61.5	56.3	5.1	69.3
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

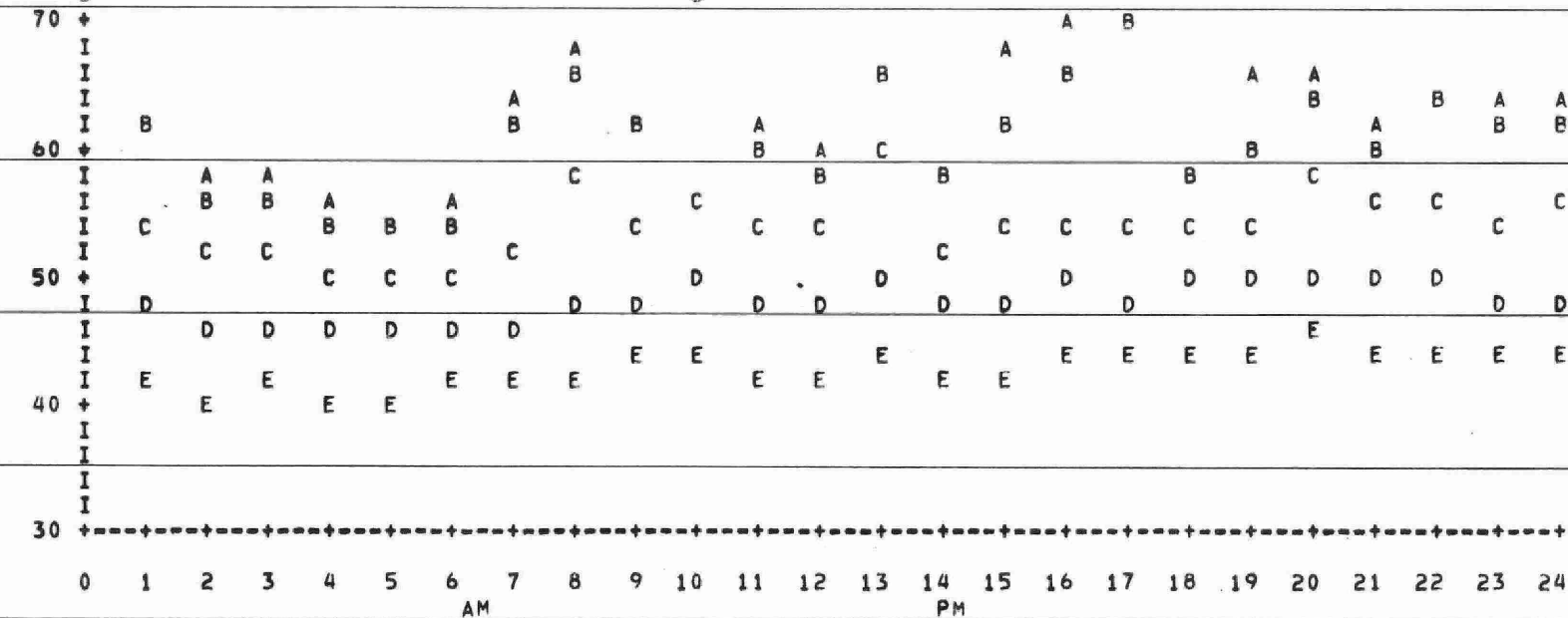
DATE AND LOCATION CODE 16A64



24 HOUR NOISE CLIMATE
DATE AND LOCATION CODE 16UG4

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	58	51	46	41	50.5	48.6	4.3	59.6
7a.m.-7p.m.	62	54	48	43	56.5	52.3	4.9	64.8
7p.m.-11p.m.	62	55	49	44	57.5	52.2	4.8	64.4
24 hour	61	54	48	42	59.5	51.4	4.9	63.8

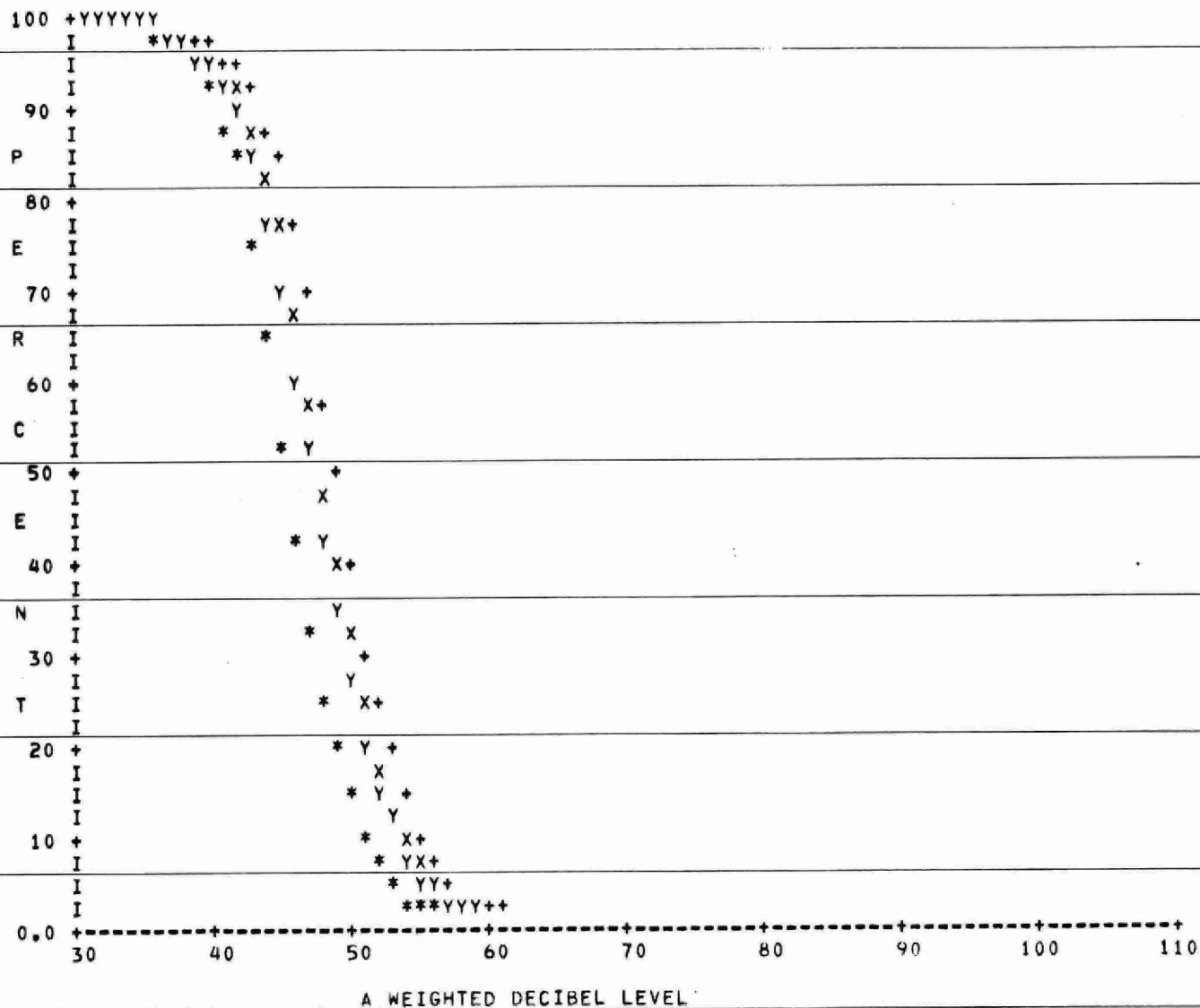
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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 16UG4



DATE AND LOCATION CODE

16MG4

PERIOD

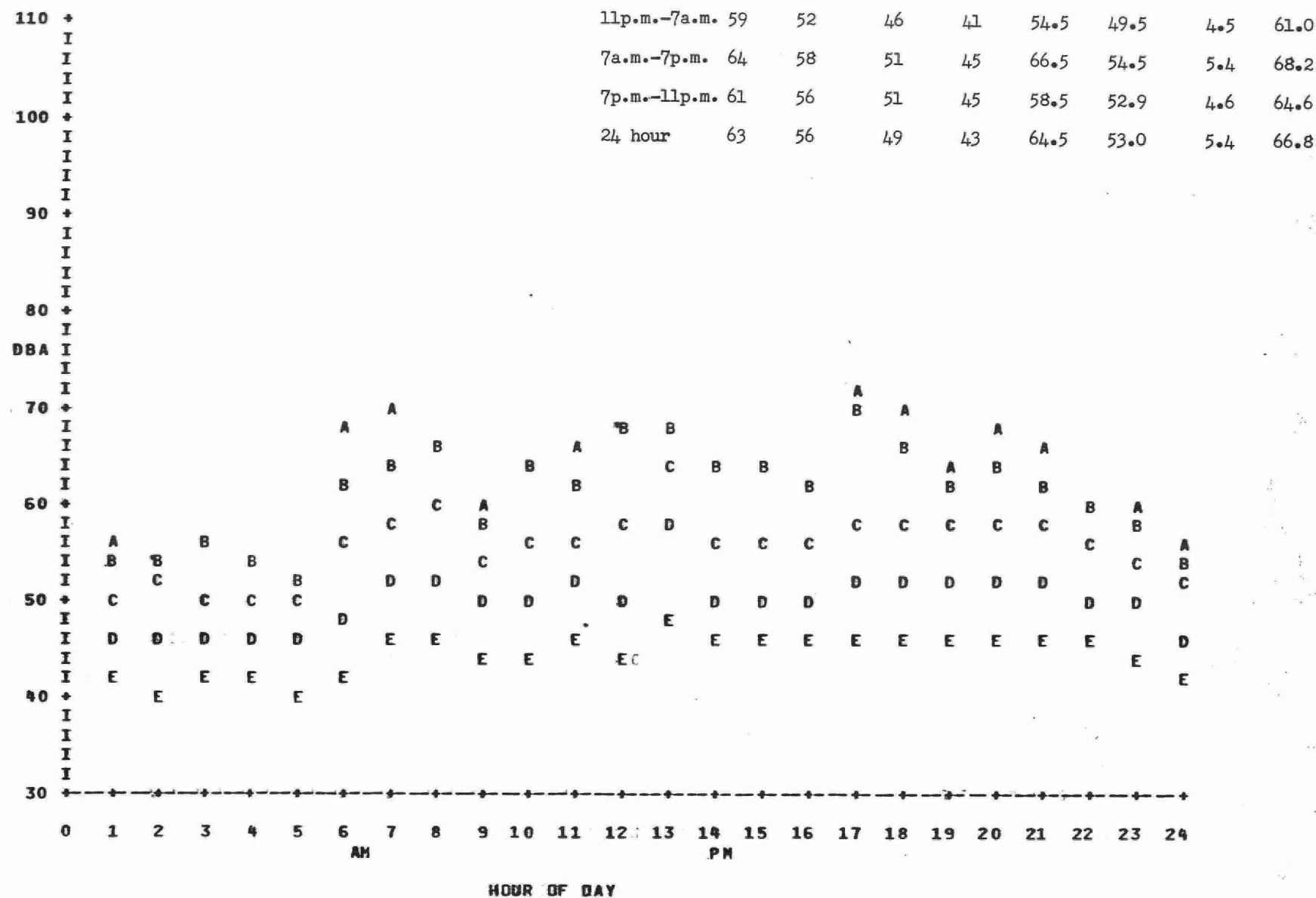
L₇L₁₀L₅₀ L_{∞}

TNI

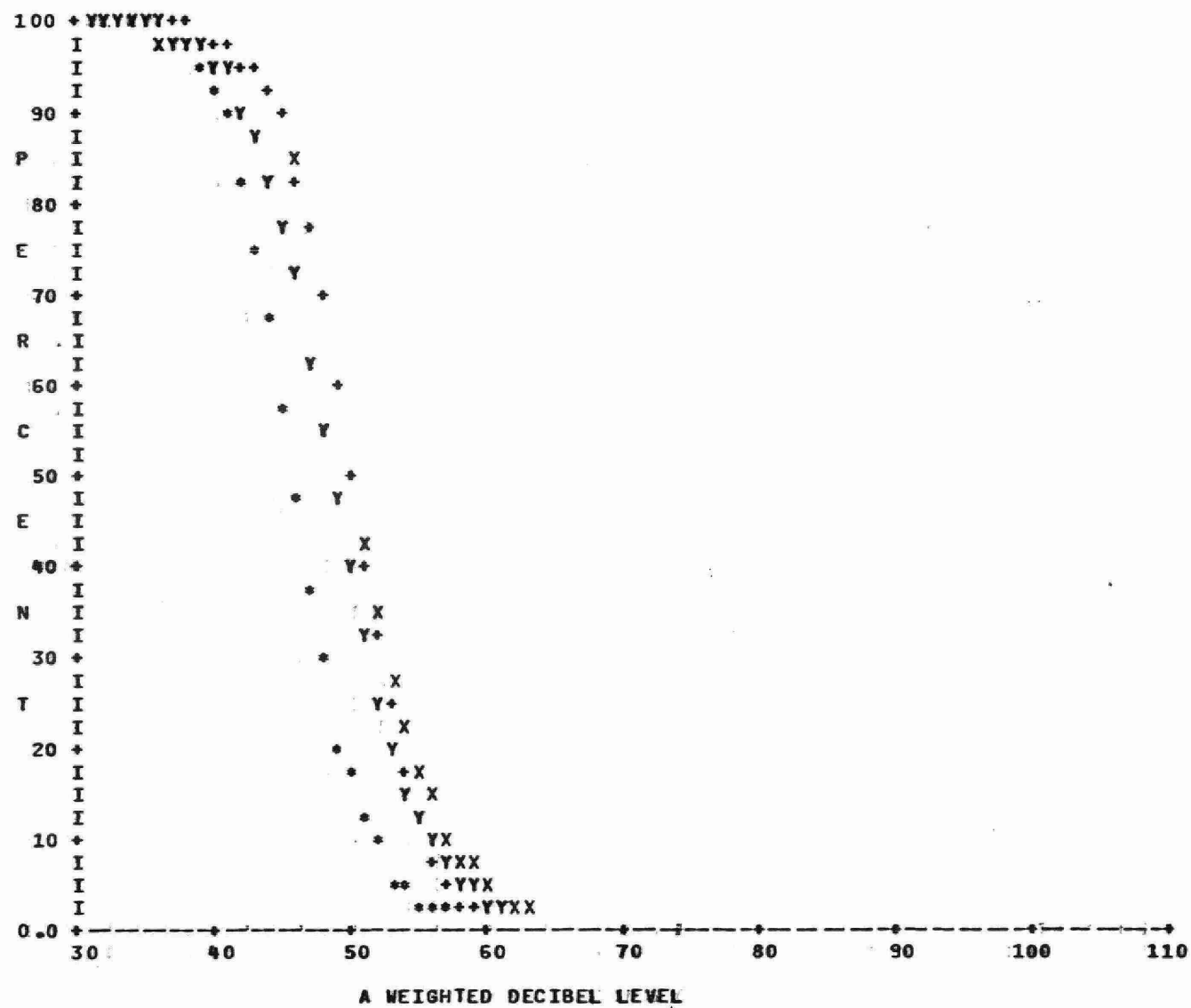
 L_{ED}

SIGMA

NPL



DATE AND LOCATION CODE 16MG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

17FW3

PERIOD

L₁

L₁₀

L₅₀

L₉₀

TNI

L_{EQ}

SIGMA

NPL

110 +	11p.m.-7a.m.	65	57	53	48	53.5	55.1	4.2	65.8
I	7a.m.-7p.m.	71	64	58	52	69.5	61.5	5.4	75.3
I	7p.m.-11p.m.	69	63	56	50	71.5	59.7	5.4	73.4
100 +	24 hour	70	63	56	49	74.5	59.8	5.5	74.1
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HOUR OF DAY

DATE AND LOCATION CODE 17FW3

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 Y + X X \\
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80	+		
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F	I		* Y+ X
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70	+		
	I		Y+ X

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BO	+		Y
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50	+	*	+
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40	+		Y
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N	I			
	I			
30	+		Y	
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T	I			X
	I	*	Y	
	I			X

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   +
   +

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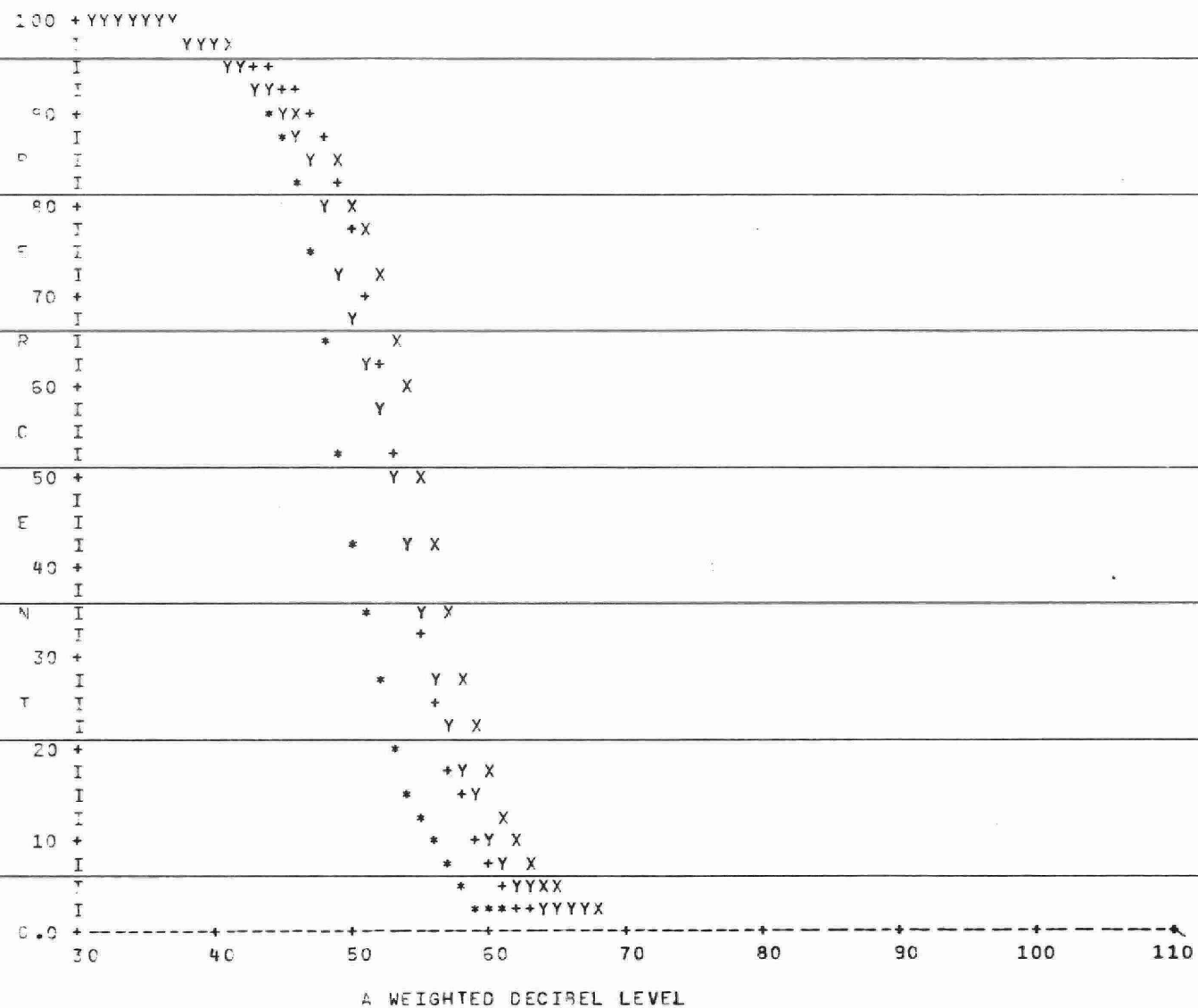
Number of Trials (X)	Number of Correct Responses (Y)
30	0.0
40	0.0
50	0.0
60	0.0
70	0.0

A WEIGHTED DECIBEL LEVEL

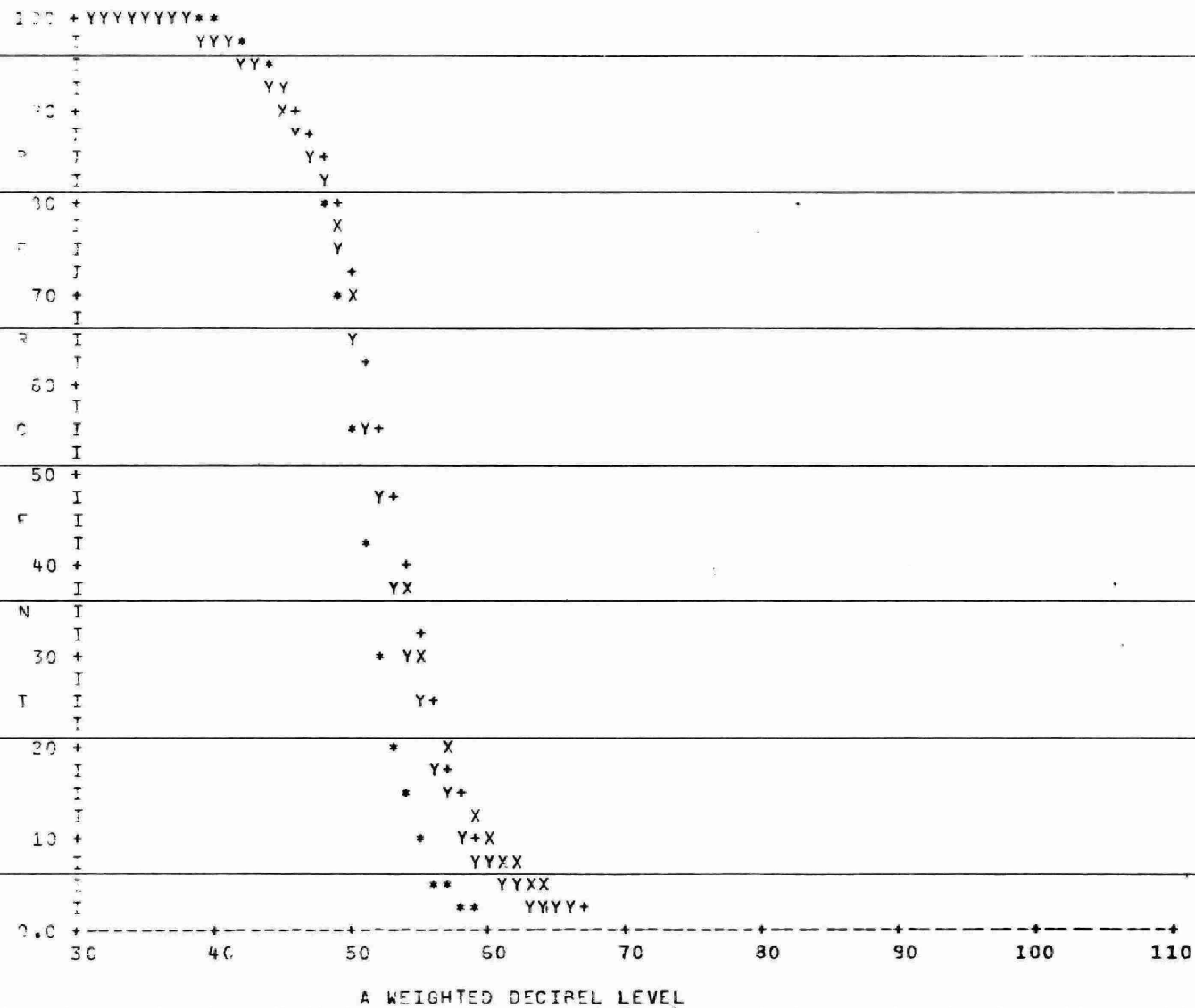
Community Description: site 17, commercial; large shopping plaza. on main arterial; Princess Street, a major arterial, 200' to North; Alcan property 400' to North; traffic circle 1000' to South-West.

Vehicular traffic from the major arterials dominates the sound environment, people sounds, commercial and parking lot activities are major intrusions. The monitor was located on a hydro pole 15' above the parking lot for the Kingston Shopping Centre.

DATE AND LOCATION CODE 17AW3



DATE AND LOCATION CODE 17UG3



24 HOUR WISE CLIMATE
DATE AND LOCATION CODE 17M03

PERIOD L₁ L₁₀ L₅₀ L₉₀ TNI L_{EQ} SIGMA NPL

110 +	11p.m.-7a.m.	62	55	49	45	54.5	52.5	4.5	64.0
I	7a.m.-7p.m.	67	62	56	49	70.5	58.5	5.6	72.8
I	7p.m.-11p.m.	66	61	54	48	69.5	56.9	5.5	71.1
100 +	24 hour	66	60	53	46	71.5	57.0	5.8	71.8
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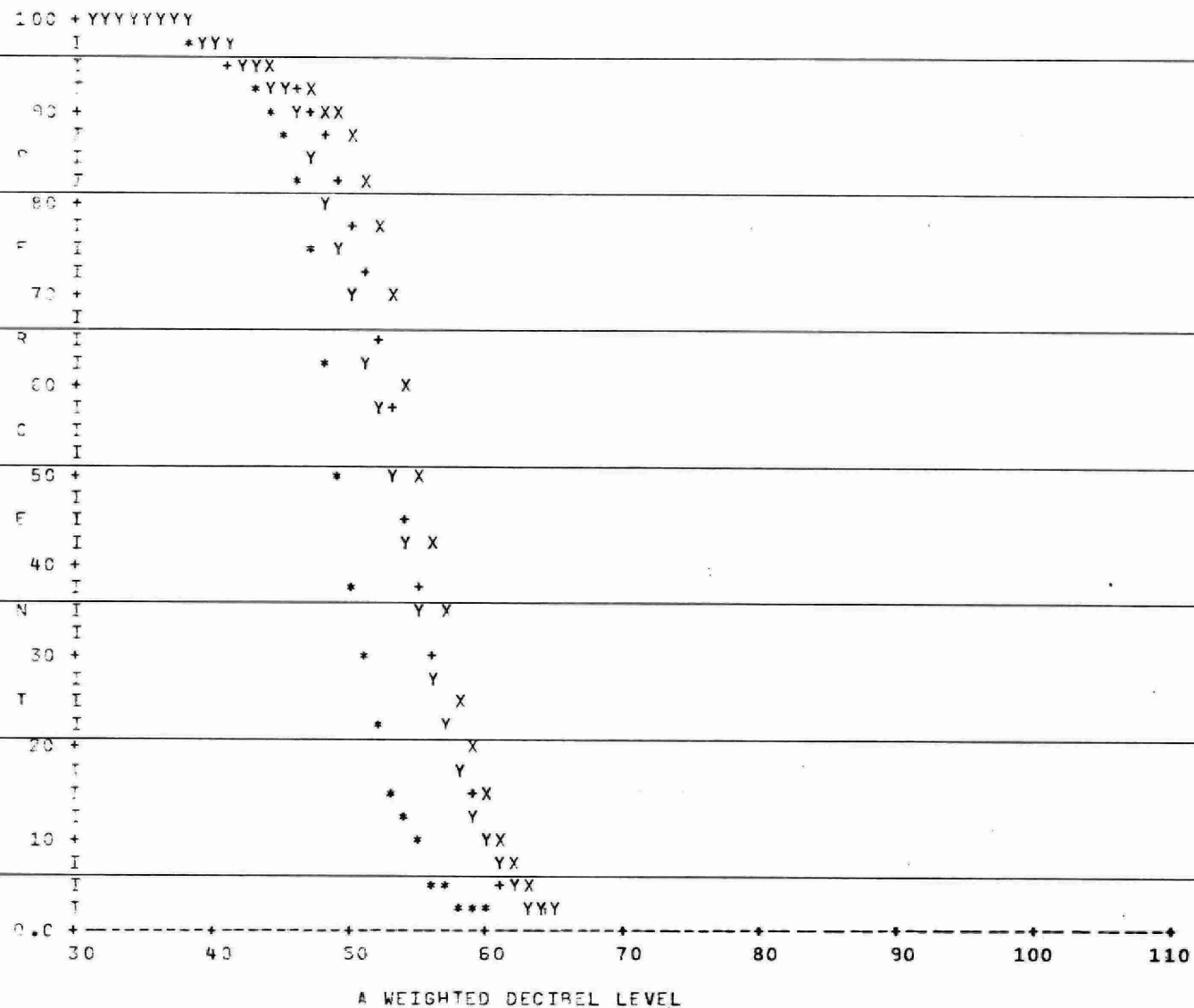
30 +									
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0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

HOUR OF DAY

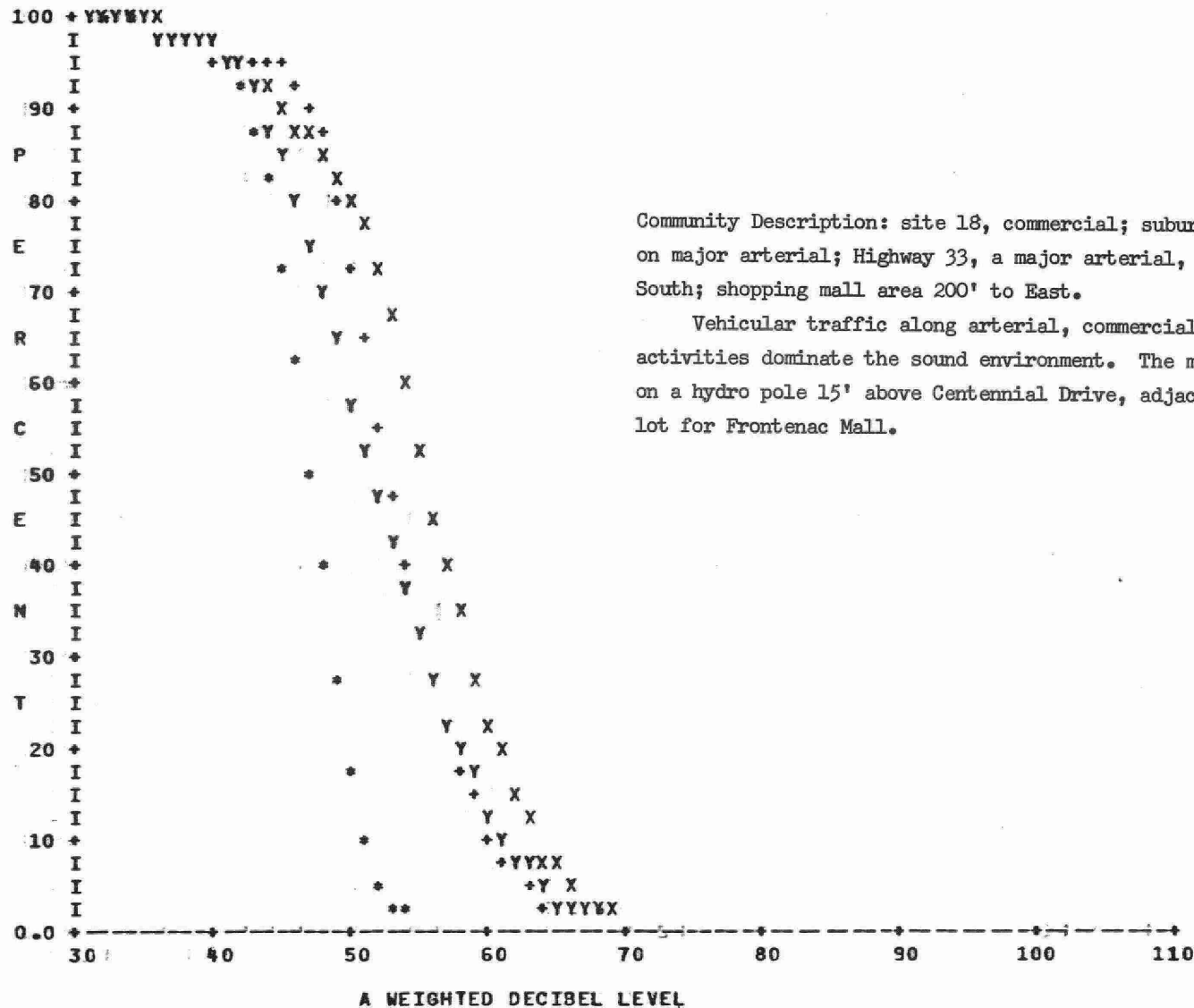
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 17M63



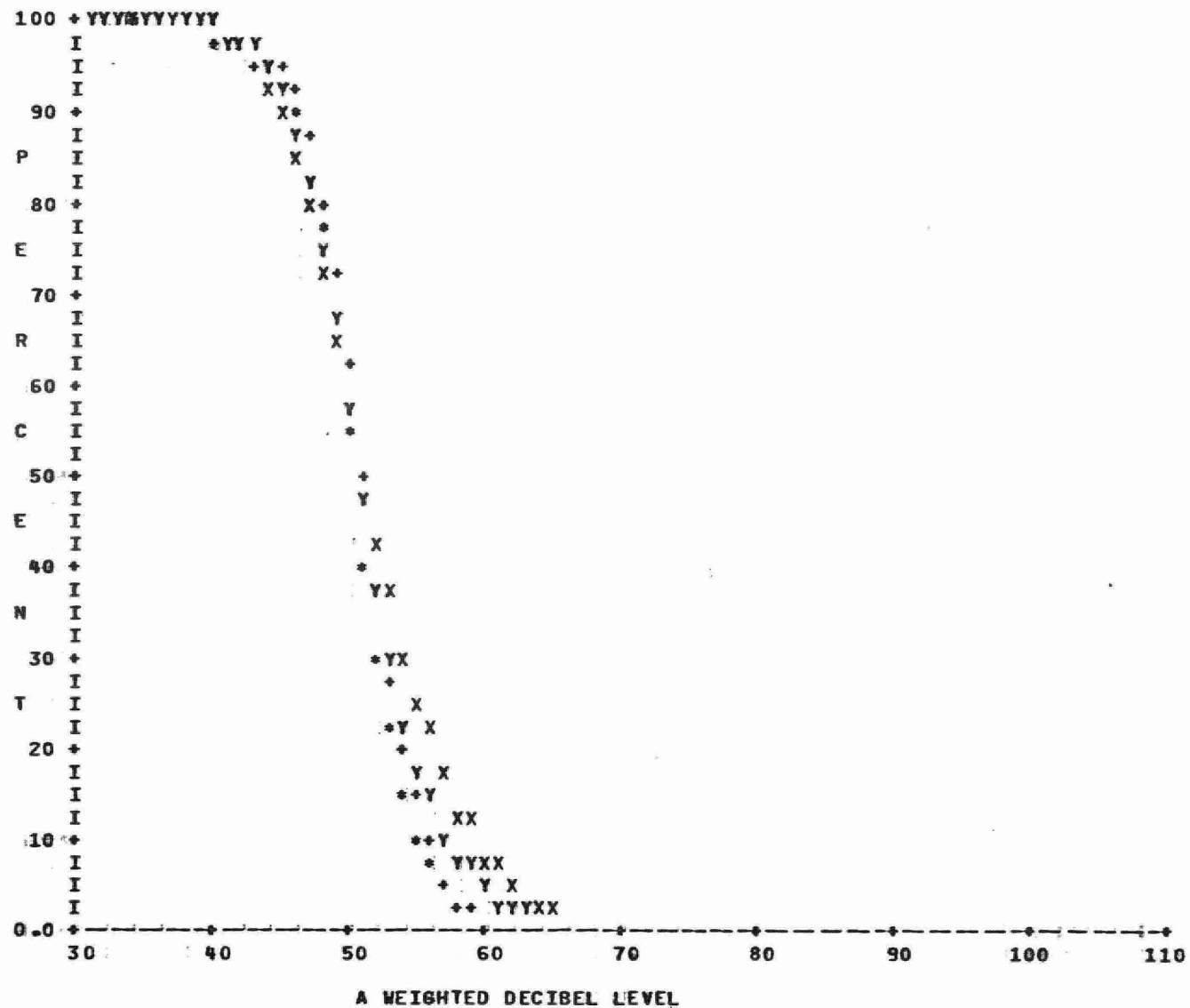
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 18AW4



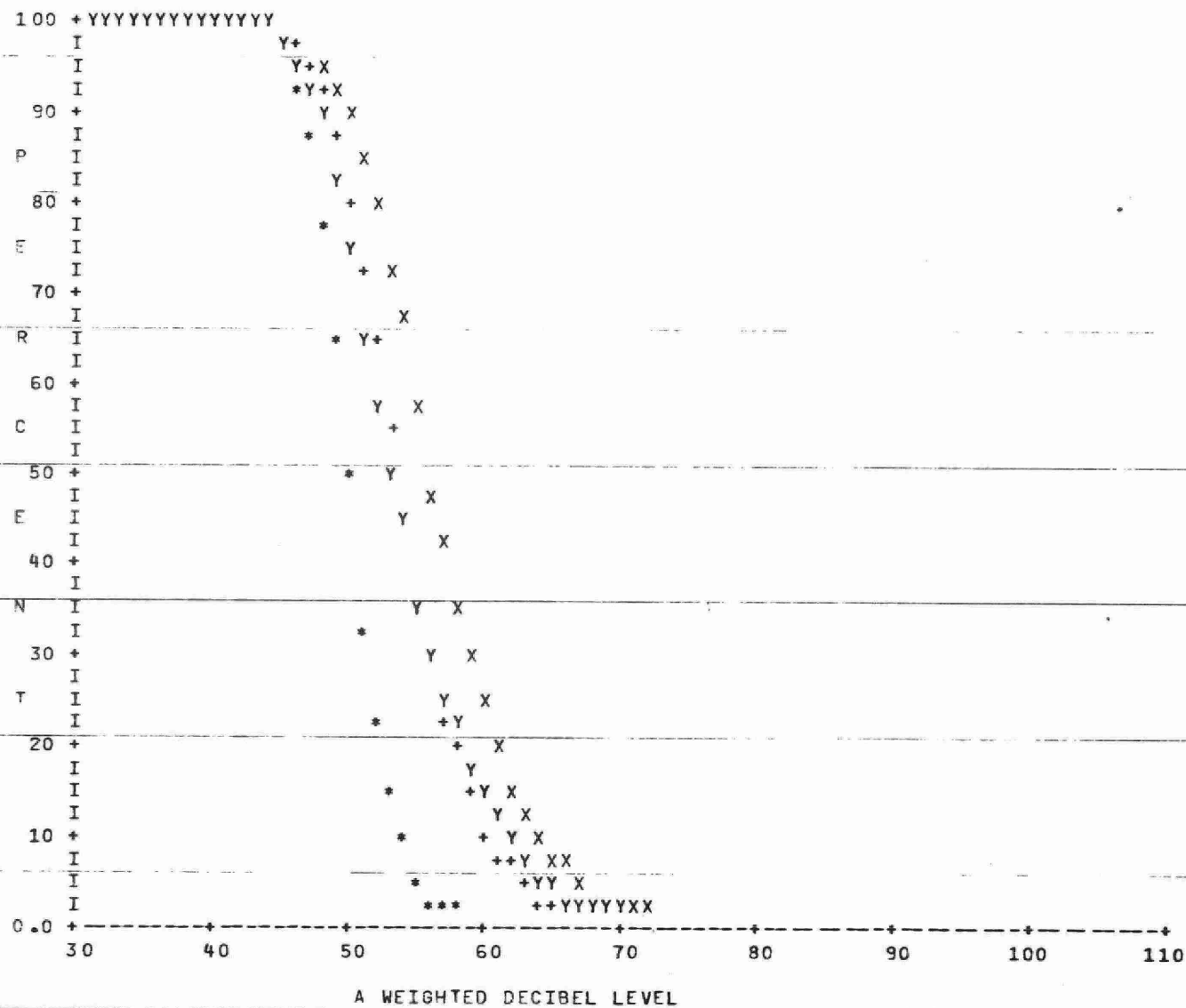
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 18UW4



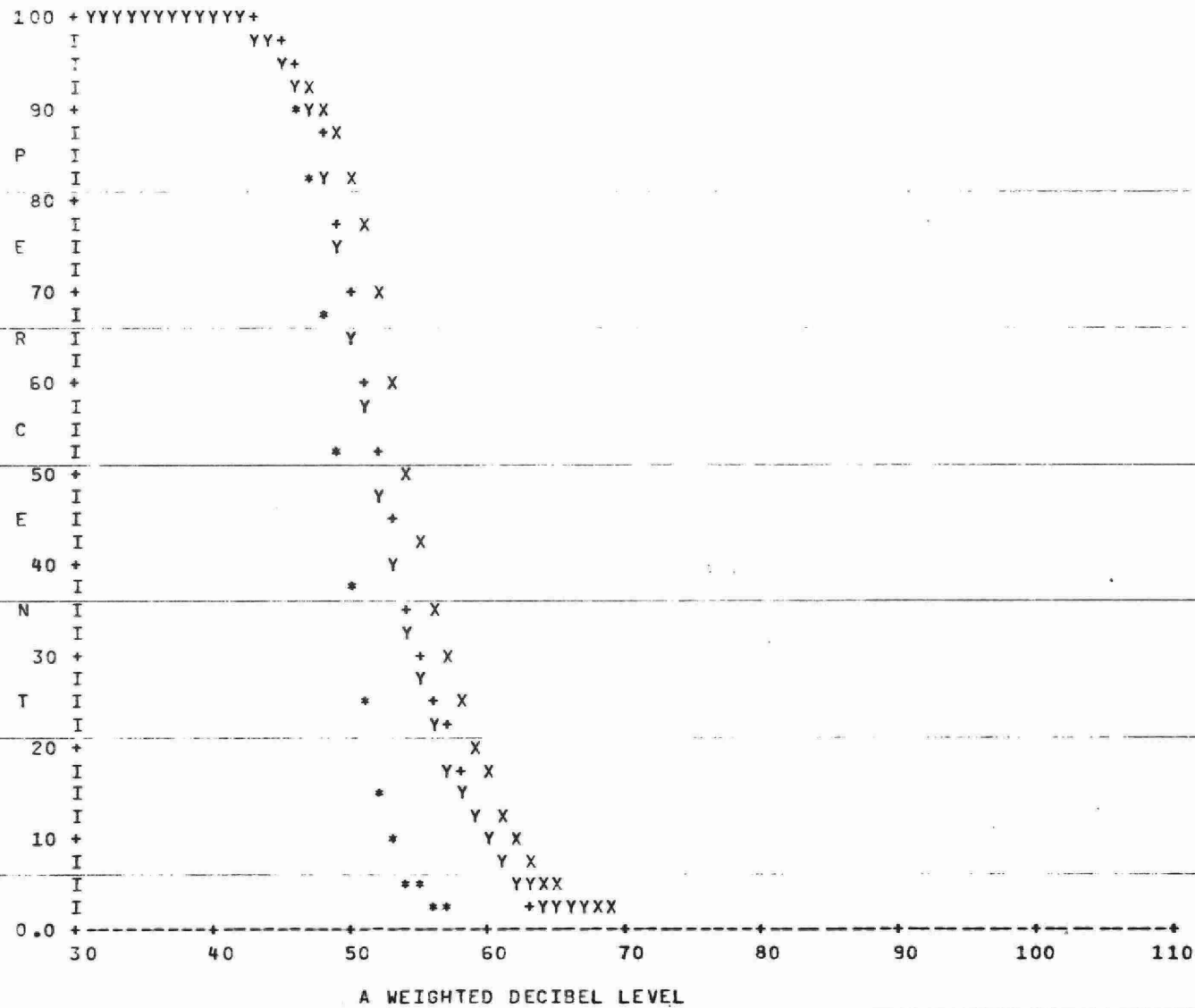
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 18M64



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

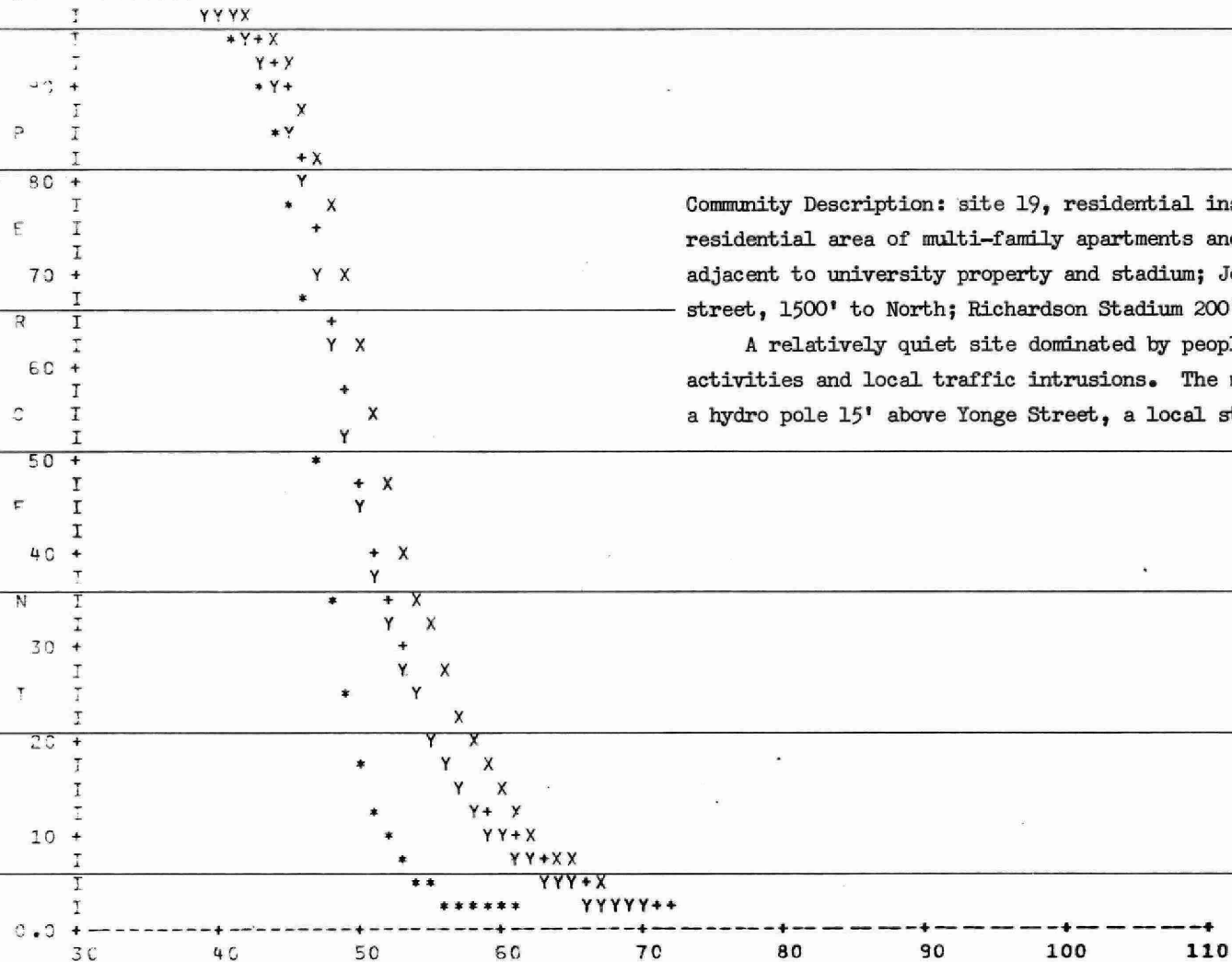
DATE AND LOCATION CODE 18T64



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 19F63

100 + YYYYYYYY+



Community Description: site 19, residential institutional; mixed residential area of multi-family apartments and single family homes adjacent to university property and stadium; Johnson Street, a busy street, 1500' to North; Richardson Stadium 200' to East.

A relatively quiet site dominated by people sounds, residential activities and local traffic intrusions. The monitor was located on a hydro pole 15' above Yonge Street, a local street.

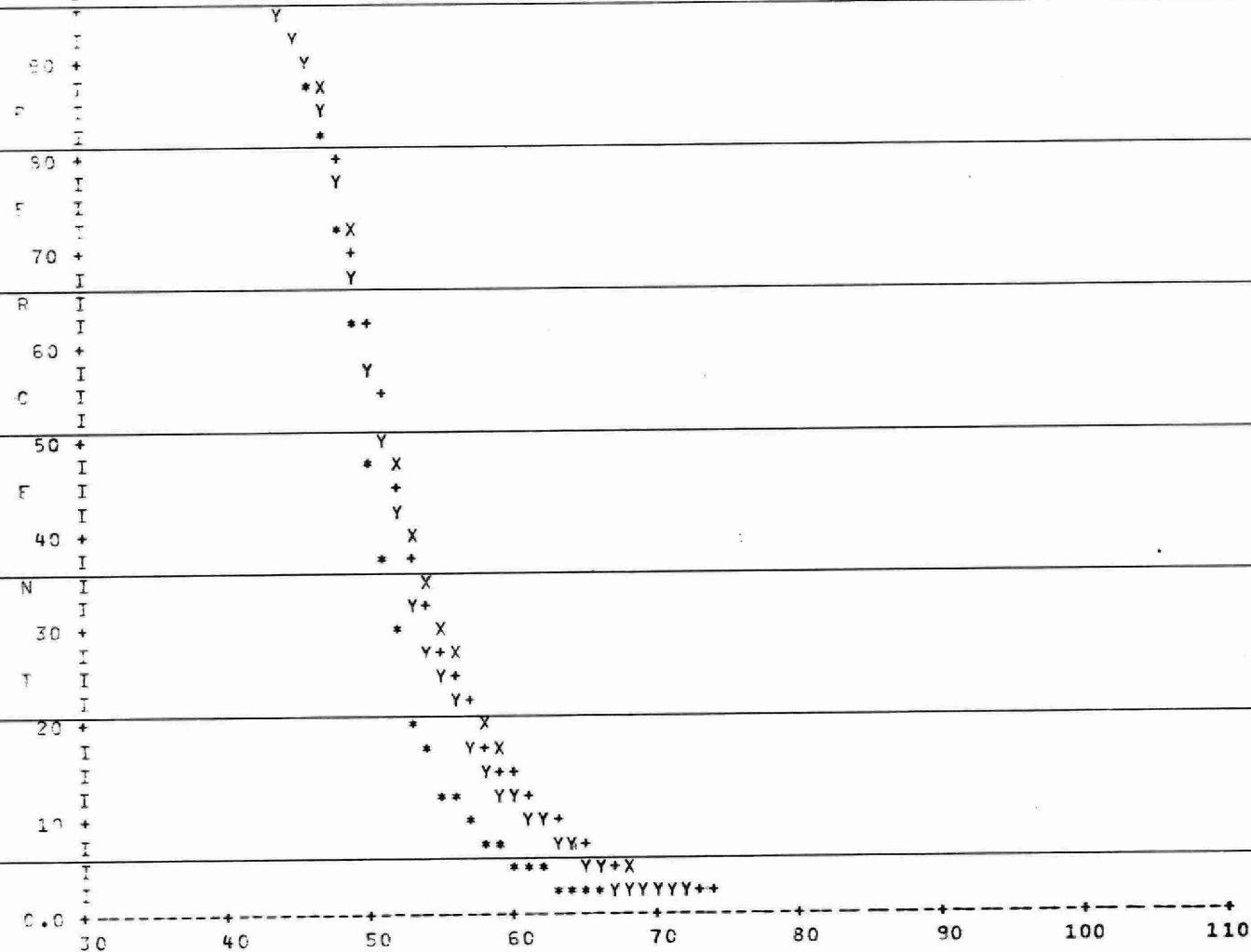
A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 19A63

100 + YYYYYYYYYY

XYY



A WEIGHTED DECIBEL LEVEL

DATE AND LOCATION CODE 18063

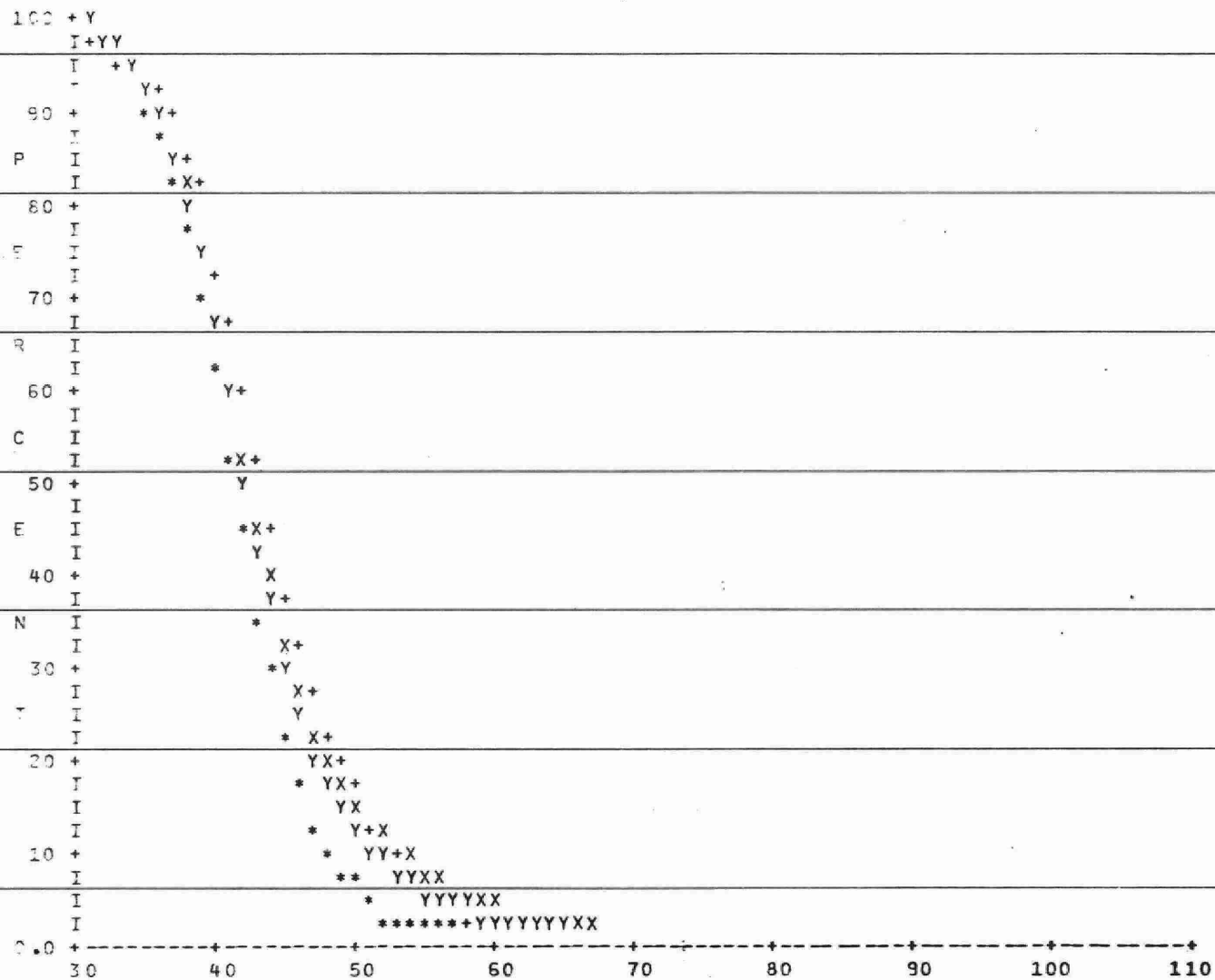
[illegible][illegible][illegible][illegible][illegible]

Diagram illustrating a 24-hour temperature profile. The temperature is constant at 30 degrees Celsius throughout the entire day (0 to 24 hours).

HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

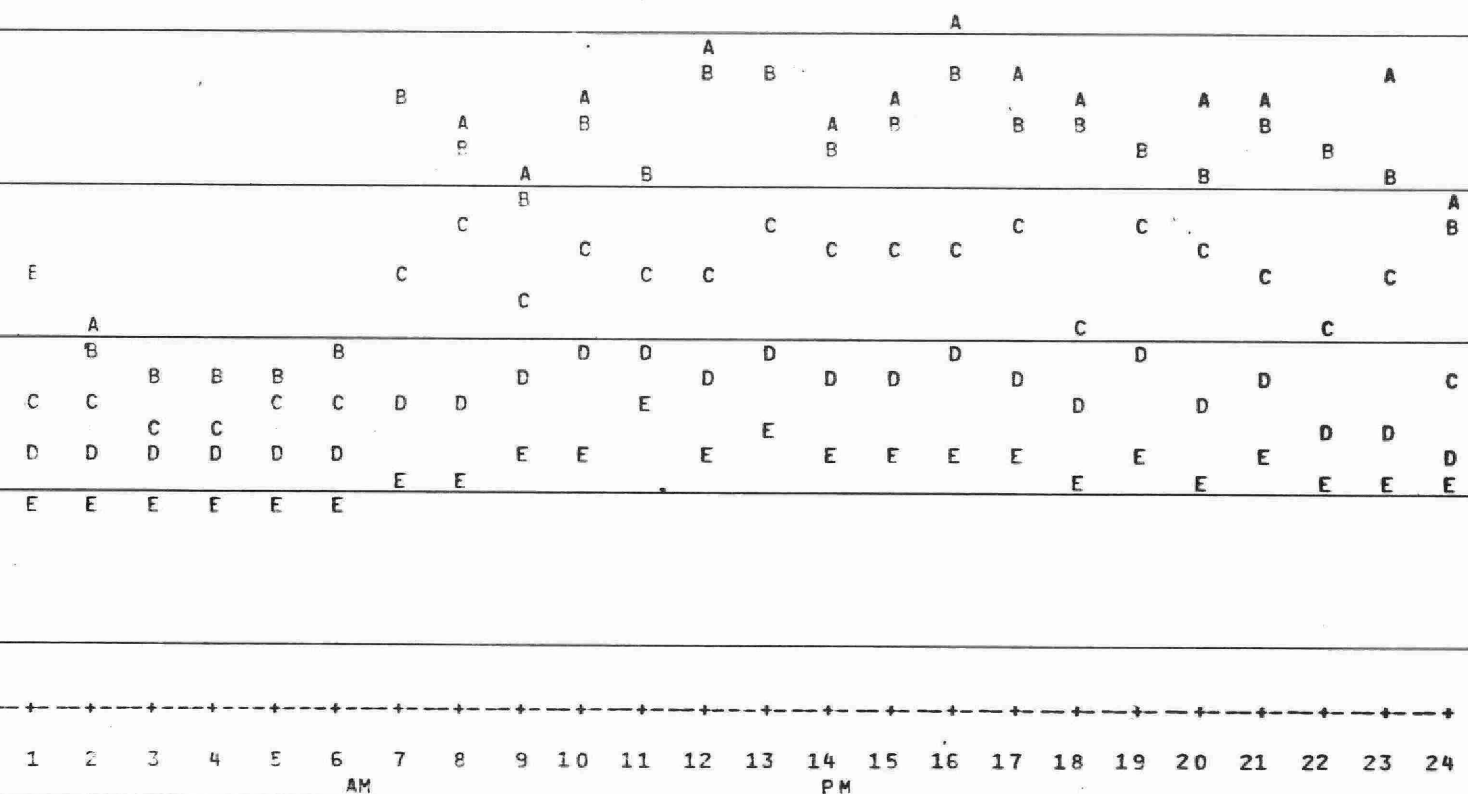
DATE AND LOCATION CODE 19063



A WEIGHTED DECIBEL LEVEL

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	65	55	50	45	54.5	54.5	4.1	65.0
7a.m.-7p.m.	74	65	56	50	79.5	62.7	6.3	78.9
7p.m.-11p.m.	72	63	54	48	77.5	60.6	6.1	76.2
24 hour	72	63	53	47	80.5	60.8	6.4	77.3

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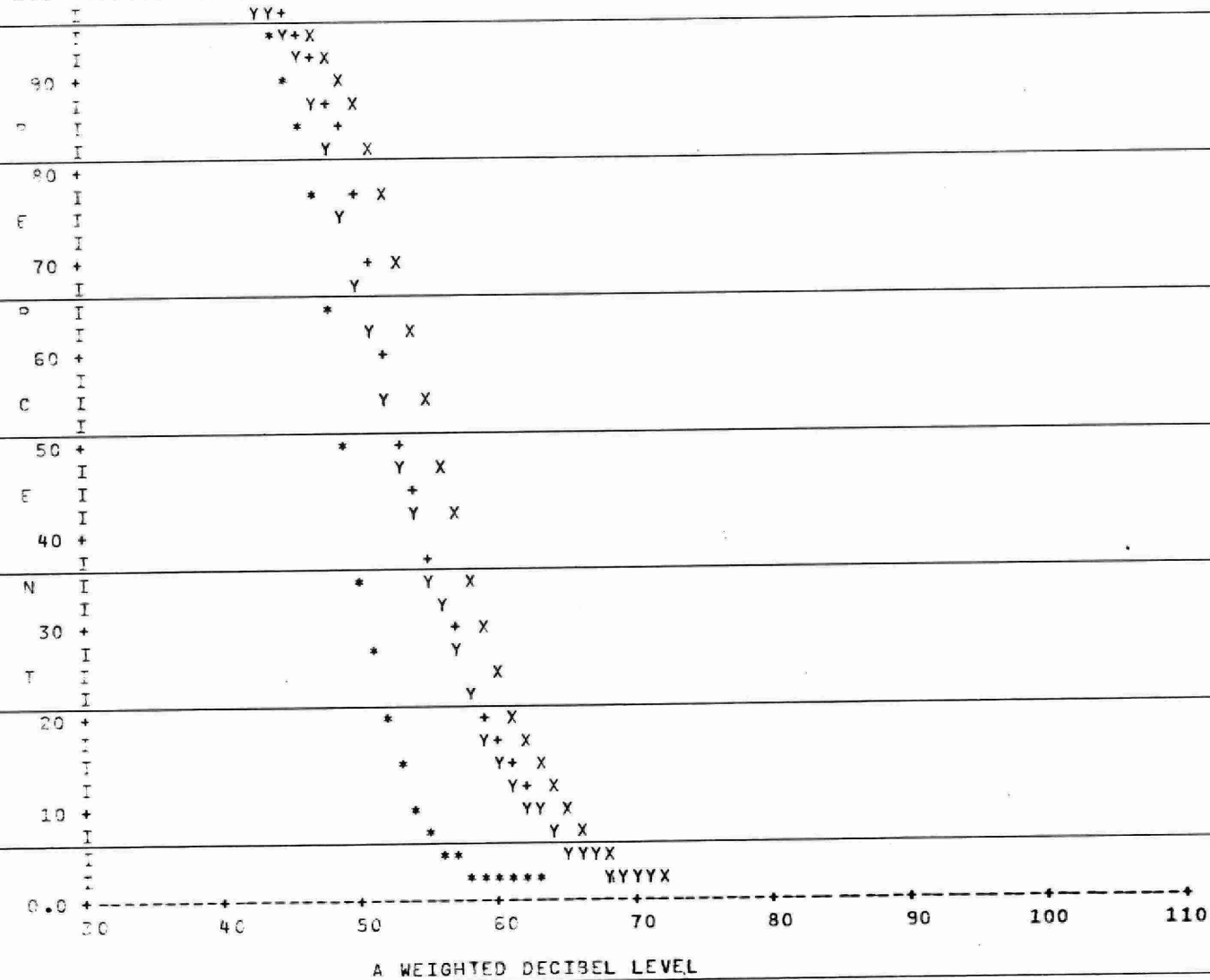


HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

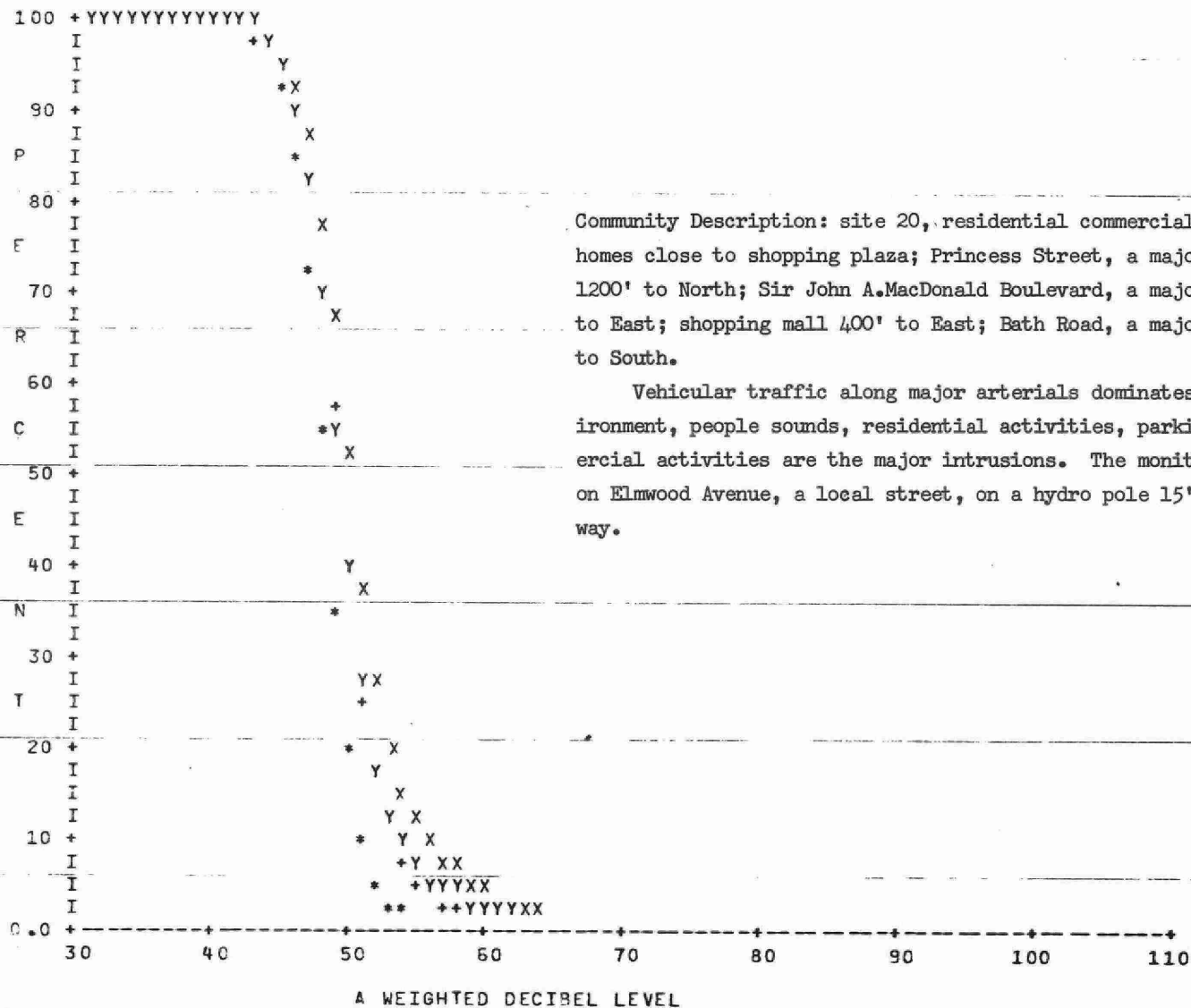
DATE AND LOCATION CODE 19TW3

100 + YYYYYYYYYYYY+

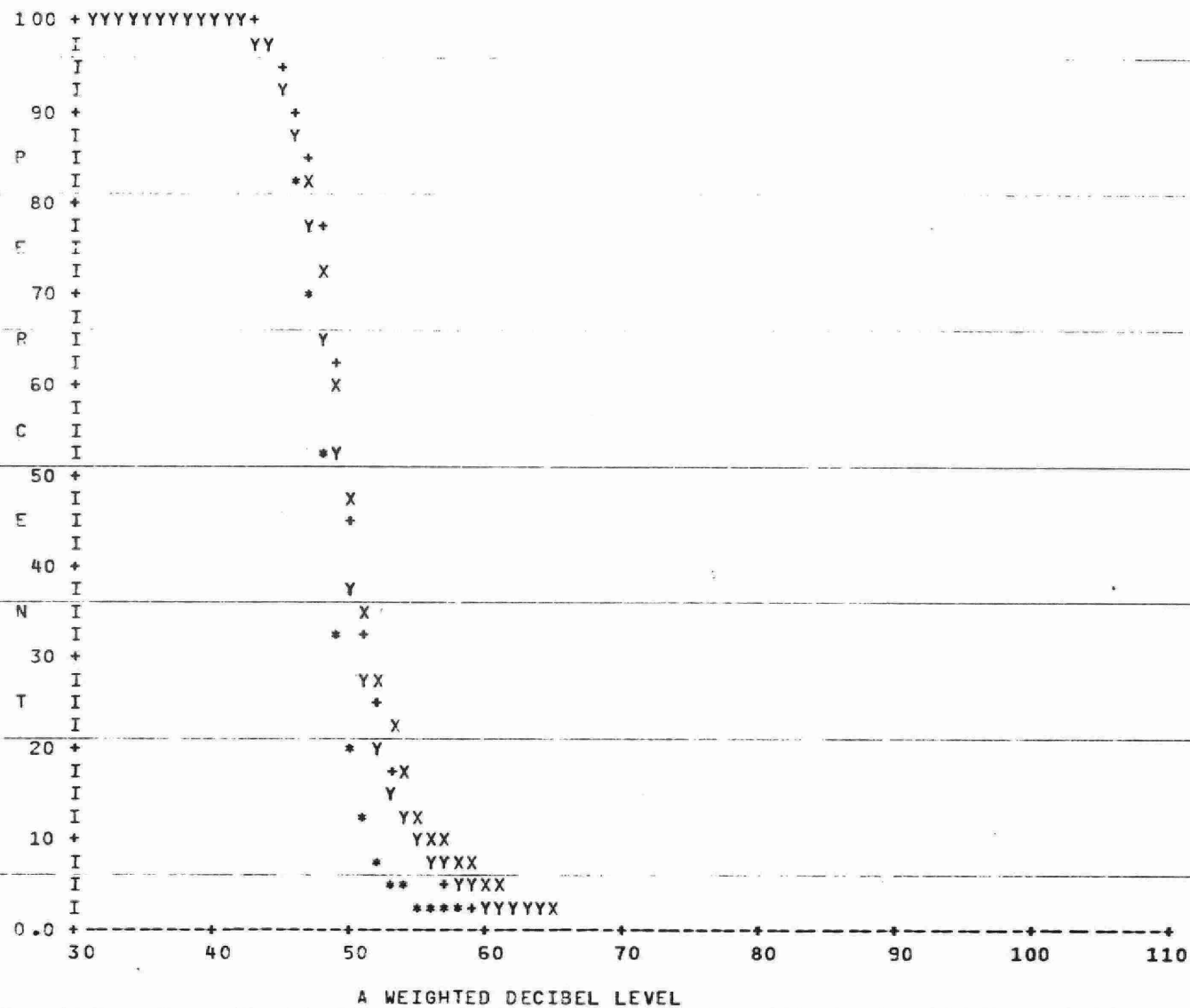


PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 20AG4



DATE AND LOCATION CODE 20UG4

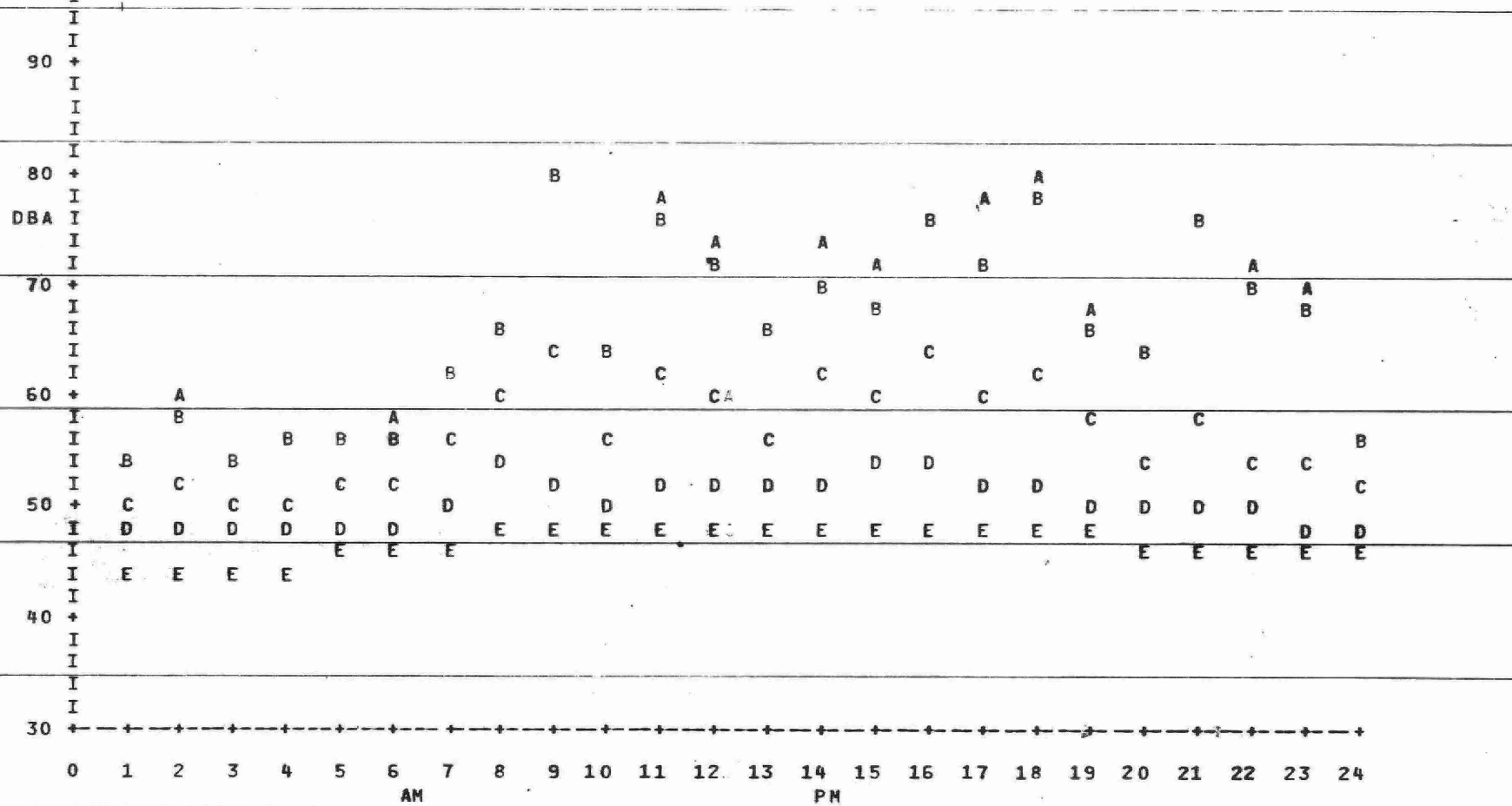


24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 20M64

PERIOD L₁ L₁₀ L₅₀ L₉₀ TNI L_{EQ} SIGMA NPL

110 +	11p.m.-7a.m.	57	51	48	44	41.5	49.2	2.9	56.7
I	7a.m.-7p.m.	71	60	51	47	68.5	58.9	5.5	73.0
I	7p.m.-11p.m.	69	55	49	46	51.5	56.3	4.7	68.4
I	24 hour	69	57	50	46	59.5	56.9	5.1	69.9



HOUR OF DAY

DATE AND LOCATION CODE 20MG4



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 20W63

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A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 21H64

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Community Description: site 21, residential; trailer park on outskirts of city; Division Street, a major arterial, 1600' to West; Highway 401, a major freeway, 2500' to North.

A relatively quiet site with distant traffic noise predominating, people sounds and residential activities are the major intrusions. The monitor was located on a hydro pole 15' above Weller Avenue, a local street.

A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 22F63

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Community Description: site 22, residential commercial industrial; older single family homes in commercial and industrial area; Montreal Street, a busy street, 200' to East; bus terminal, commercial and industrial shops in immediate vicinity.

General industrial and commercial activities dominate the sound environment, traffic noise and people sounds are the intrusions. The monitor was located on a hydro pole 15' above Hickson Avenue, a busy local street.

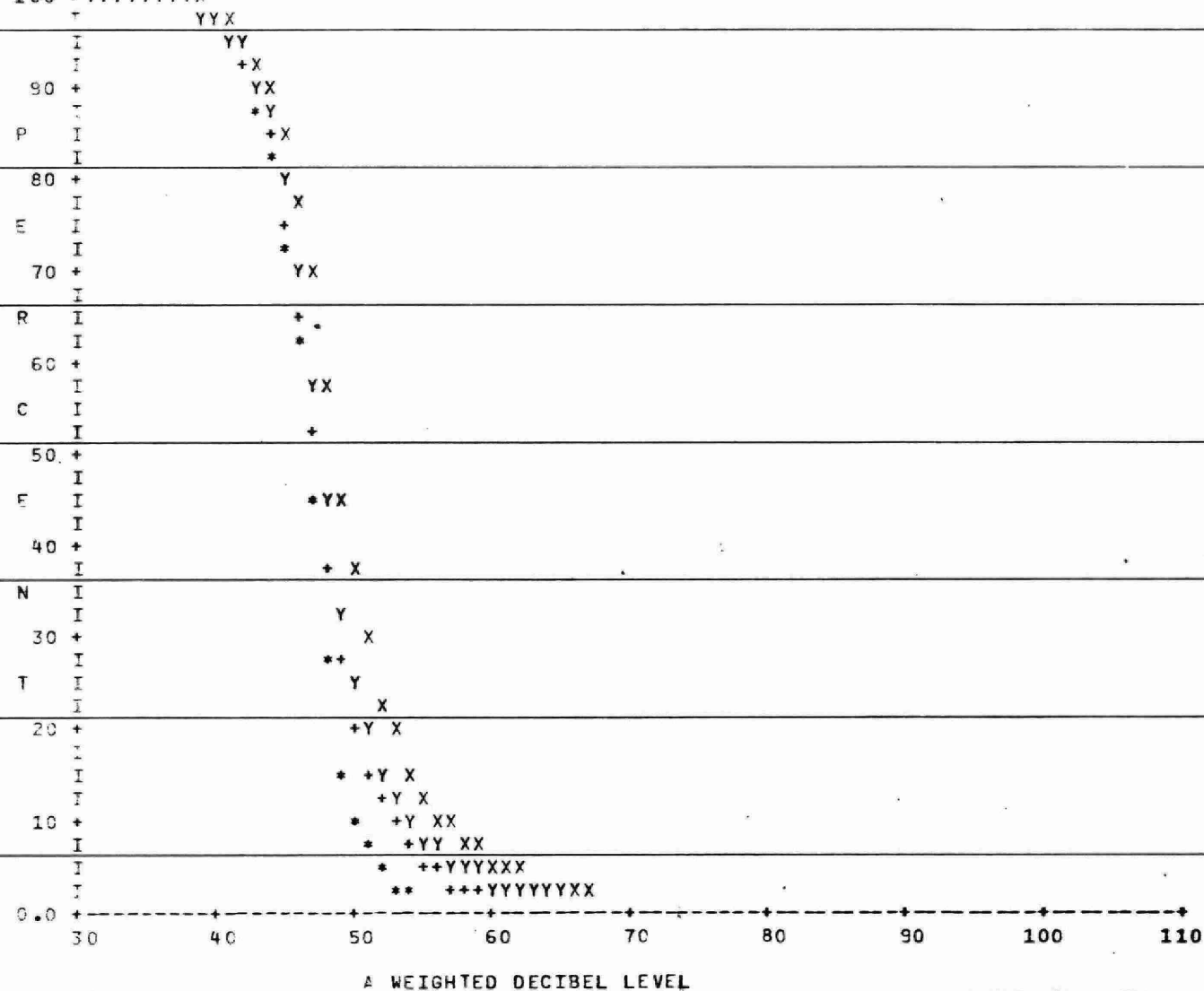
0.0 20 40 60 80 100 110

A WEIGHTED DECIBEL LEVEL

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 22AG3

100 + YYYYYYYYX



	P	11p.m.-7a.m.	55	50	47	43	40.5	48.4	3.1	56.5
110 + I										
I		7a.m.-7p.m.	70	56	48	43	64.5		6.1	
I										
I		7p.m.-11p.m.	77	54	48	44	53.5		5.8	76.0
100 + I I		24 hour	68	53	47	43	52.5		5.3	

HOUR OF DAY

DATE AND LOCATION CODE 22UG3

*YY

[illegible]

A WEIGHTED DECIBEL LEVEL

110 +		11p.m.-7a.m.	62	52	43	36	69.5	50.9	6.3	67.2
I		7a.m.-7p.m.	78	63	48	39	104.5		9.4	
I		7p.m.-11p.m.	65	56	48	39	76.5	57.2	6.5	73.8
100 +		hour	74	58	46	38	87.5		8.4	
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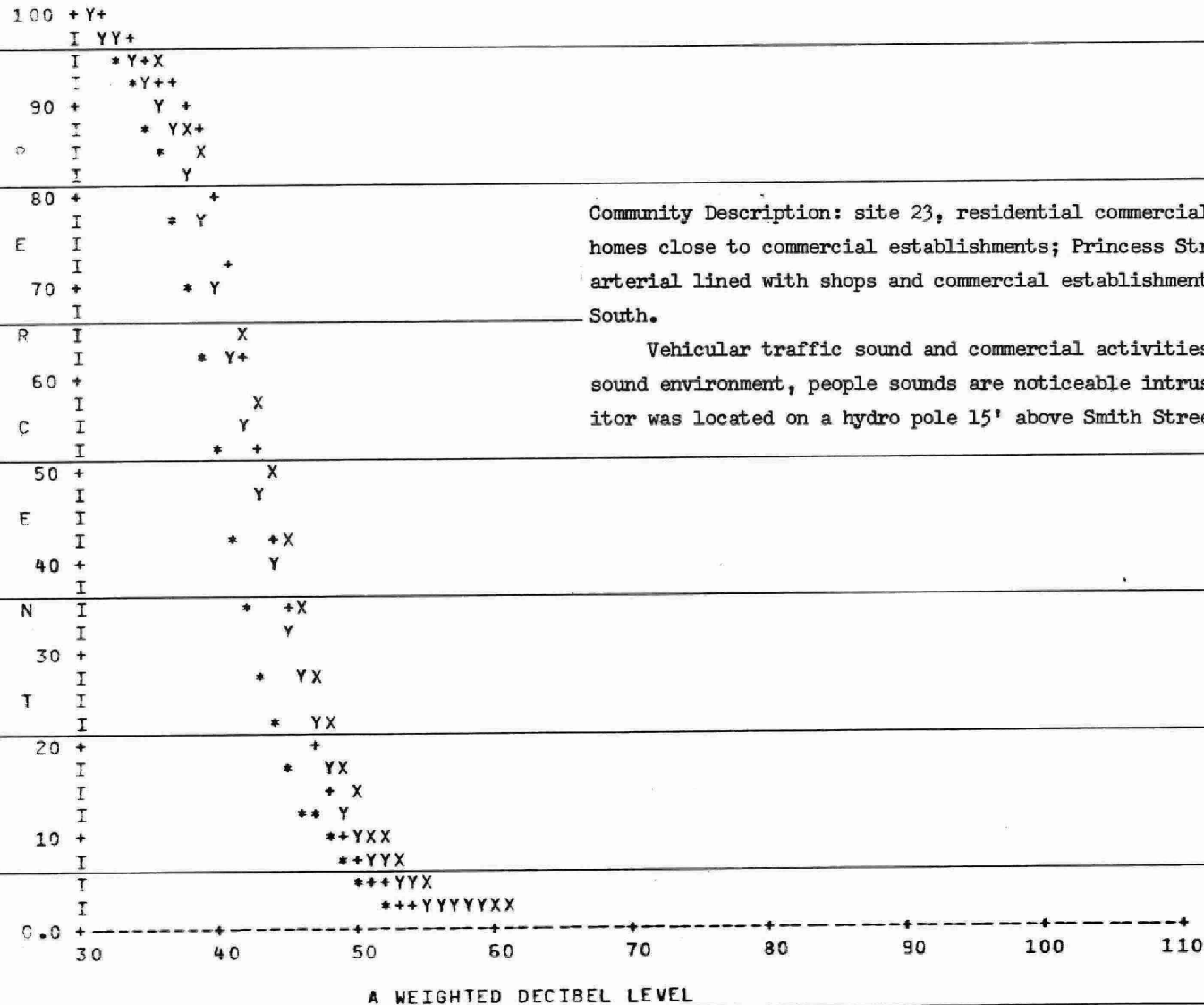
HOUR OF DAY

DATE AND LOCATION CODE 22MG3



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

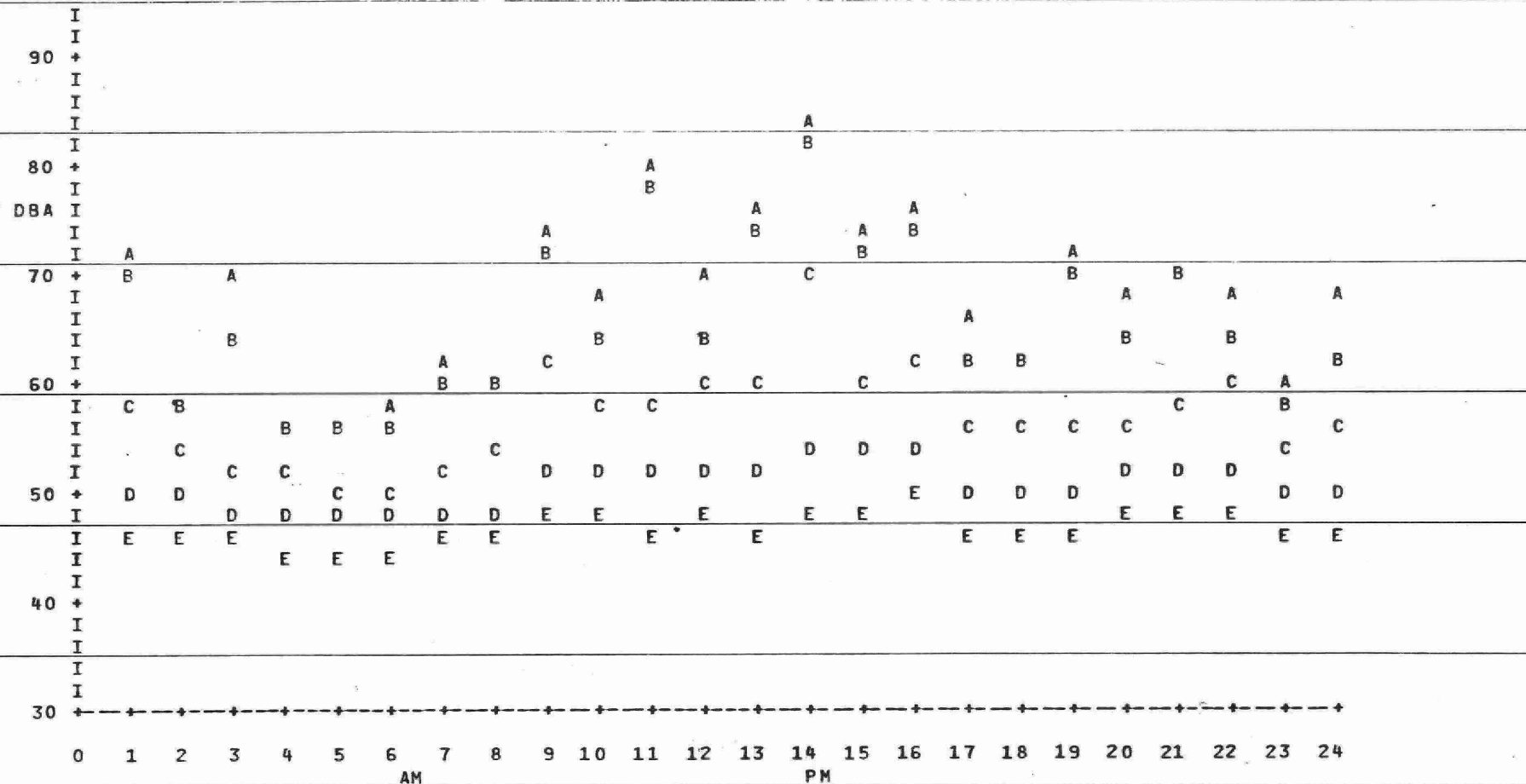
DATE AND LOCATION CODE 23FG4



Community Description: site 23, residential commercial; single family homes close to commercial establishments; Princess Street, a major arterial lined with shops and commercial establishments, 200' to South.

Vehicular traffic sound and commercial activities dominate the sound environment, people sounds are noticeable intrusions. The monitor was located on a hydro pole 15' above Smith Street, a local street.

110 +	11p.m.-7a.m.	62	53	48	45	46.5	51.6	3.8	61.4
I									
I	7a.m.-7p.m.	71	59	51	46	67.5	59.2	5.6	73.5
I									
I	7p.m.-11p.m.	64	57	51	47	56.5	54.4	4.4	65.6
100 +									
I	24 hour	69	57	50	45	62.5	57.0	5.1	70.1
I									



HOUR OF DAY

DATE AND LOCATION CODE 23AG4

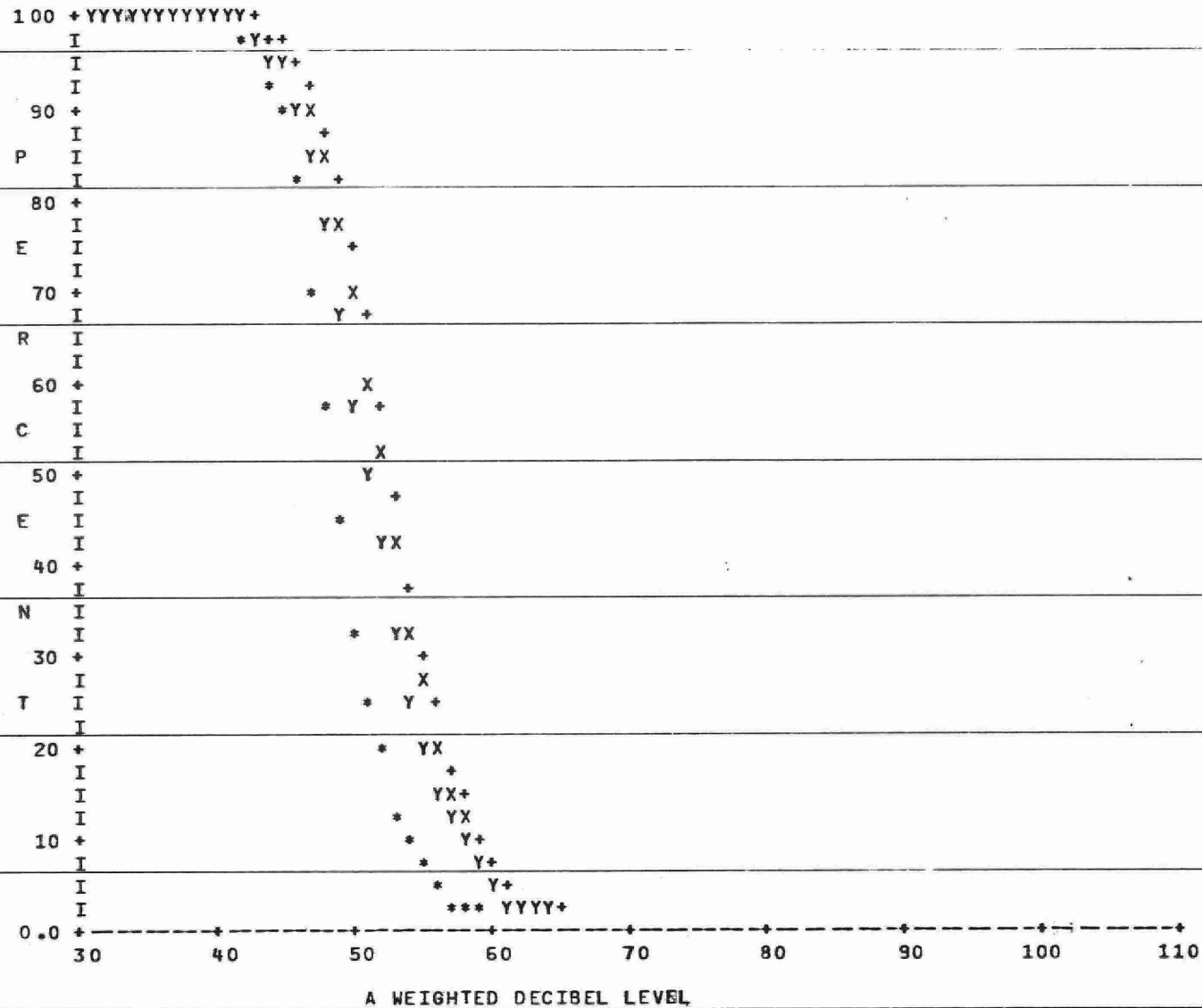
Figure 1: Scatter plot of the number of 'I' characters versus the number of 'Y' and 'X' characters in a string.

String	Count of 'I'	Count of 'Y'	Count of 'X'
I	30	0	0
I	30	0	0
I	30	0	0
90 +	30	0	0
I	30	0	0
P	30	0	0
I	30	0	0
I	30	0	0
80 +	30	0	0
I	30	0	0
E	30	0	0
I	30	0	0
I	30	0	0
70 +	30	0	0
I	30	0	0
R	30	0	0
I	30	0	0
I	30	0	0
60 +	30	0	0
I	30	0	0
C	30	0	0
I	30	0	0
I	30	0	0
50 +	30	0	0
I	30	0	0
E	30	0	0
I	30	0	0
I	30	0	0
40 +	30	0	0
I	30	0	0
N	30	0	0
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30 +	30	0	0
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I	30	0	0
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0.0	30	0	0

A WEIGHTED DECIBEL LEVEL

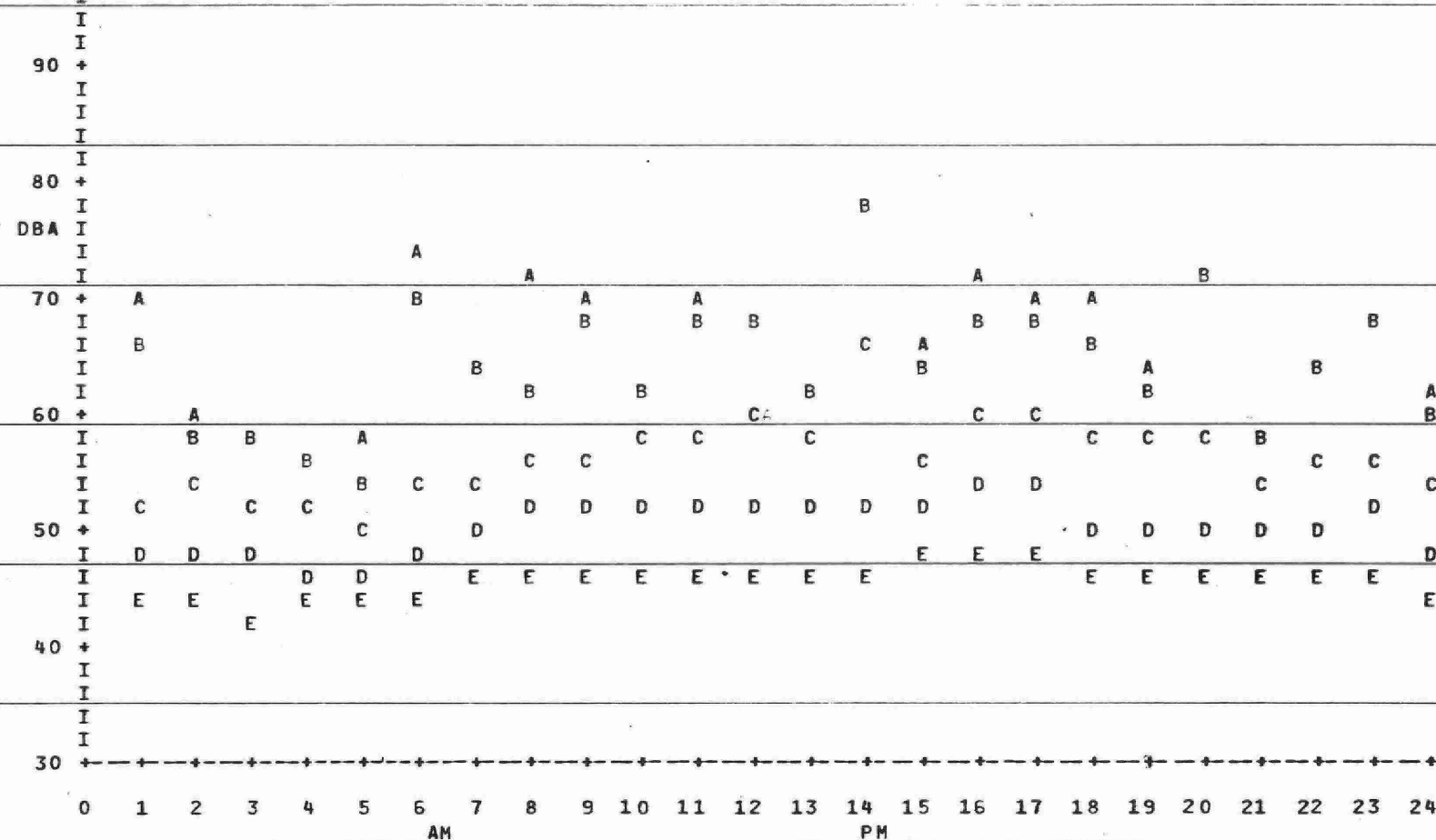
PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 23UG4



24 HOUR NOISE CLIMATE
DATE AND LOCATION CODE 23MG4

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{BQ}	SIGMA	NPL
11p.m.-7a.m.	61	52	47	43	48.5	51.5	4.1	62.0
7a.m.-7p.m.	67	58	52	46	63.5	56.5	5.1	69.6
7p.m.-11p.m.	64	56	50	45	58.5	53.7	4.6	65.5
24 hour	66	56	50	44	61.5	54.9	5.1	67.8



HOUR OF DAY

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
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100	+	11p.m.-7a.m.	60	54	46	39	68.5	50.4	5.5	64.4
		7a.m.-7p.m.	69	58	49	41	78.5	64.2	7.0	82.0
		7p.m.-11p.m.	66	56	48	40	73.5	53.8	6.3	69.8
200	+	24 hour	67	56	48	40	73.5	61.4	6.5	78.1

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Time (t)	Intensity (I)
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23	30
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HOUR OF DAY

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 24WS3

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A WEIGHTED DECIBEL LEVEL

Community Description: site 24, residential industrial; mixed residential area of single family homes and multi-family units close to mixed industrial area; Division Street, a major arterial, 50' to East; industrial area approx. 100' to East.

Vehicular traffic sound from the major arterial dominates, industrial noise, people sounds and residential activity are the major intrusions. The monitor was located on a hydro pole 15' above Barbara Street, a local street.

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m. 64	54	50	48	41.5	53.8	3.3	62.2	
7a.m.-7p.m. 67	59	54	50	55.5	57.2	4.0	67.5	
7p.m.-11p.m. 63	56	52	49	46.5	54.0	3.2	62.1	
24 hour 66	58	52	48	57.5	55.8	4.0	66.1	

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PM

HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 25HG4

100 + YYYYYYYYYYYYYY

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A WEIGHTED DECIBEL LEVEL

Community Description: site 25, residential; old single family homes, duplexes and low rise apartments in residential area; Division Street, a major arterial, 200' to West.

A relatively quiet site with vehicular traffic noise, people sounds and residential activity the major intrusions. The monitor was located on a hydro pole 15' above Prime Street, a local street.

DATE AND LOCATION CODE

26TG3

PERIOD

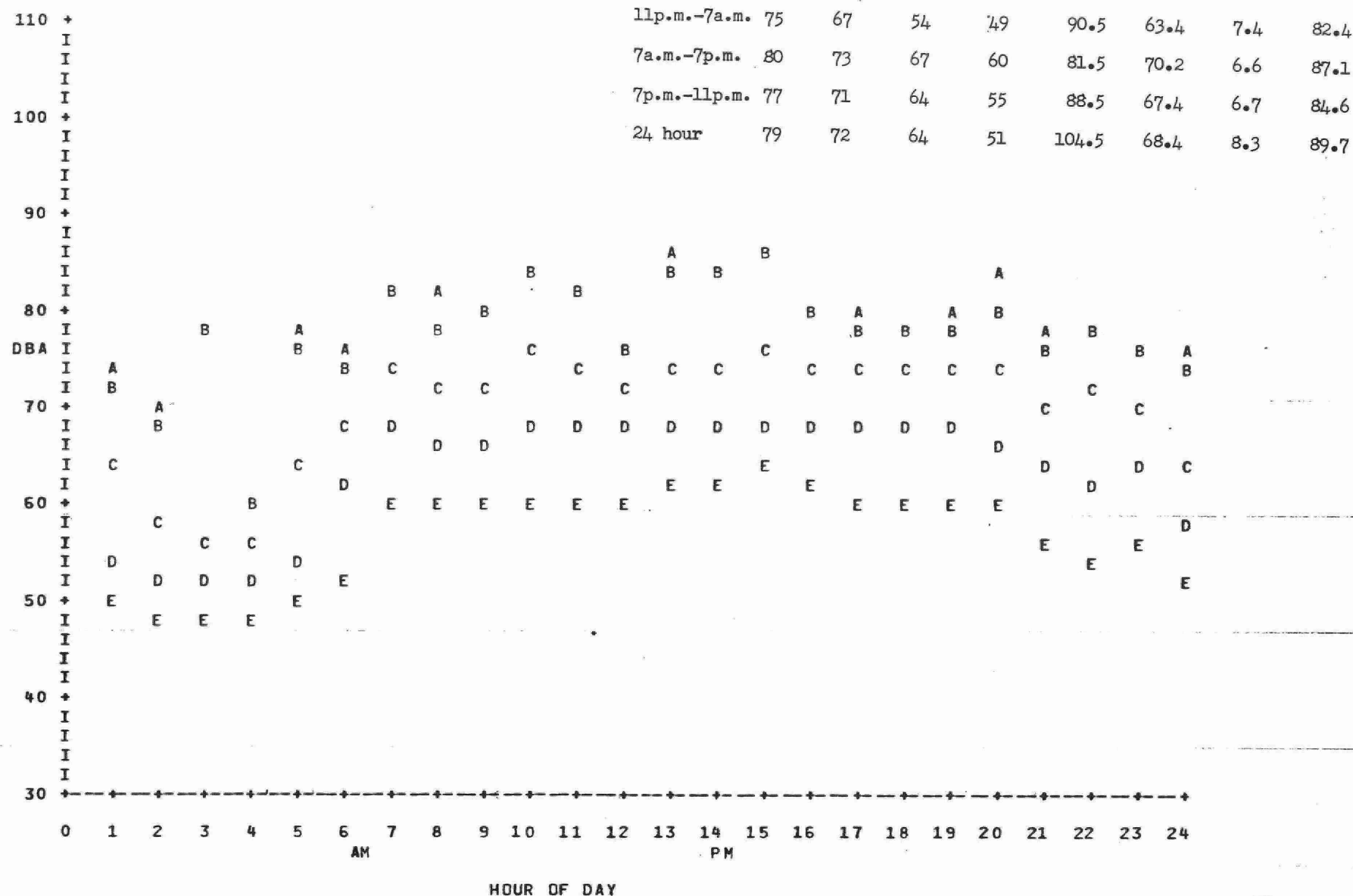
L₇L₇₀ L_{50} L_{∞}

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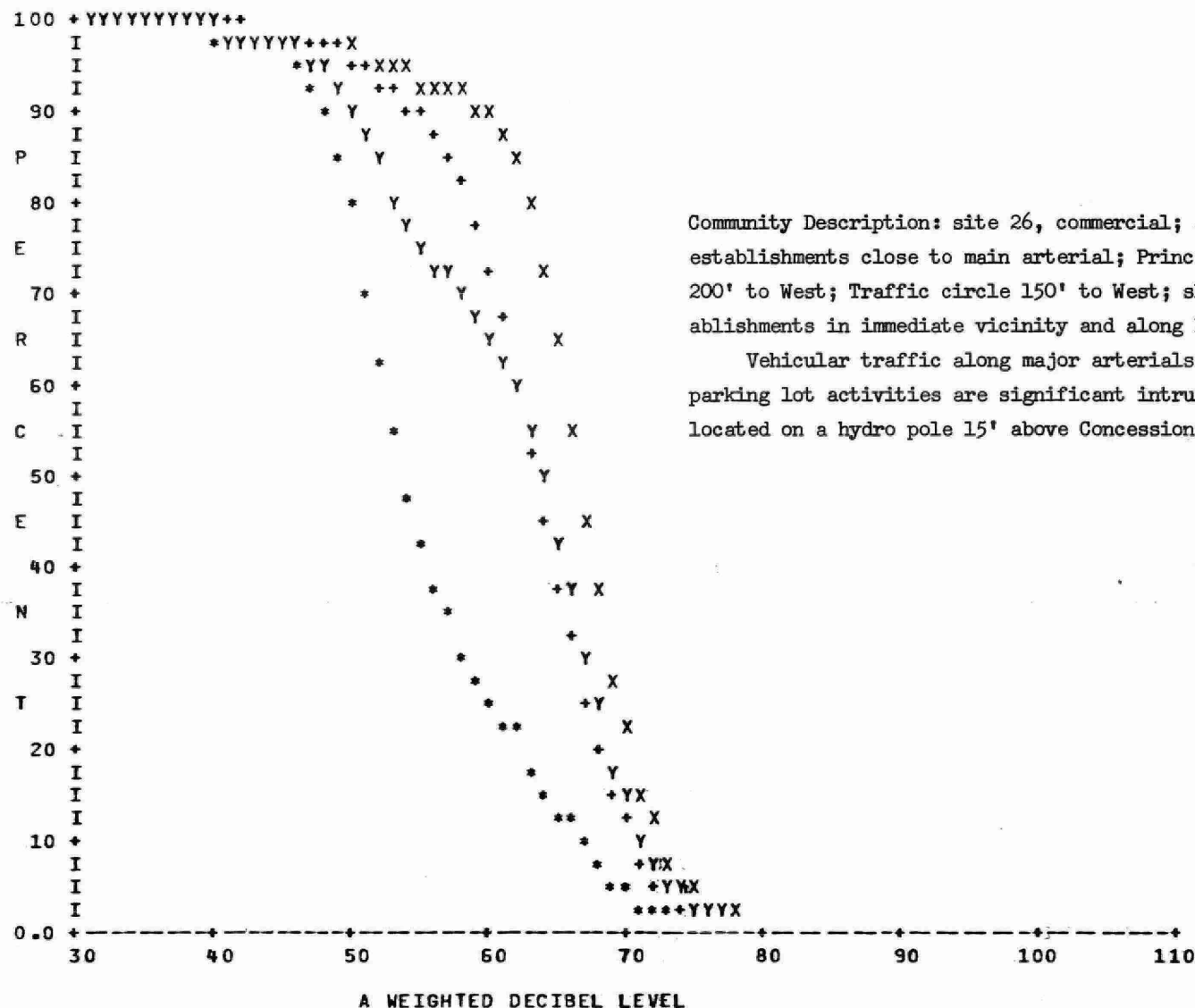
SIGMA

NPL



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 26TG3



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE

27TG4

PERIOD

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L₁₀

L₅₀

L₉₀

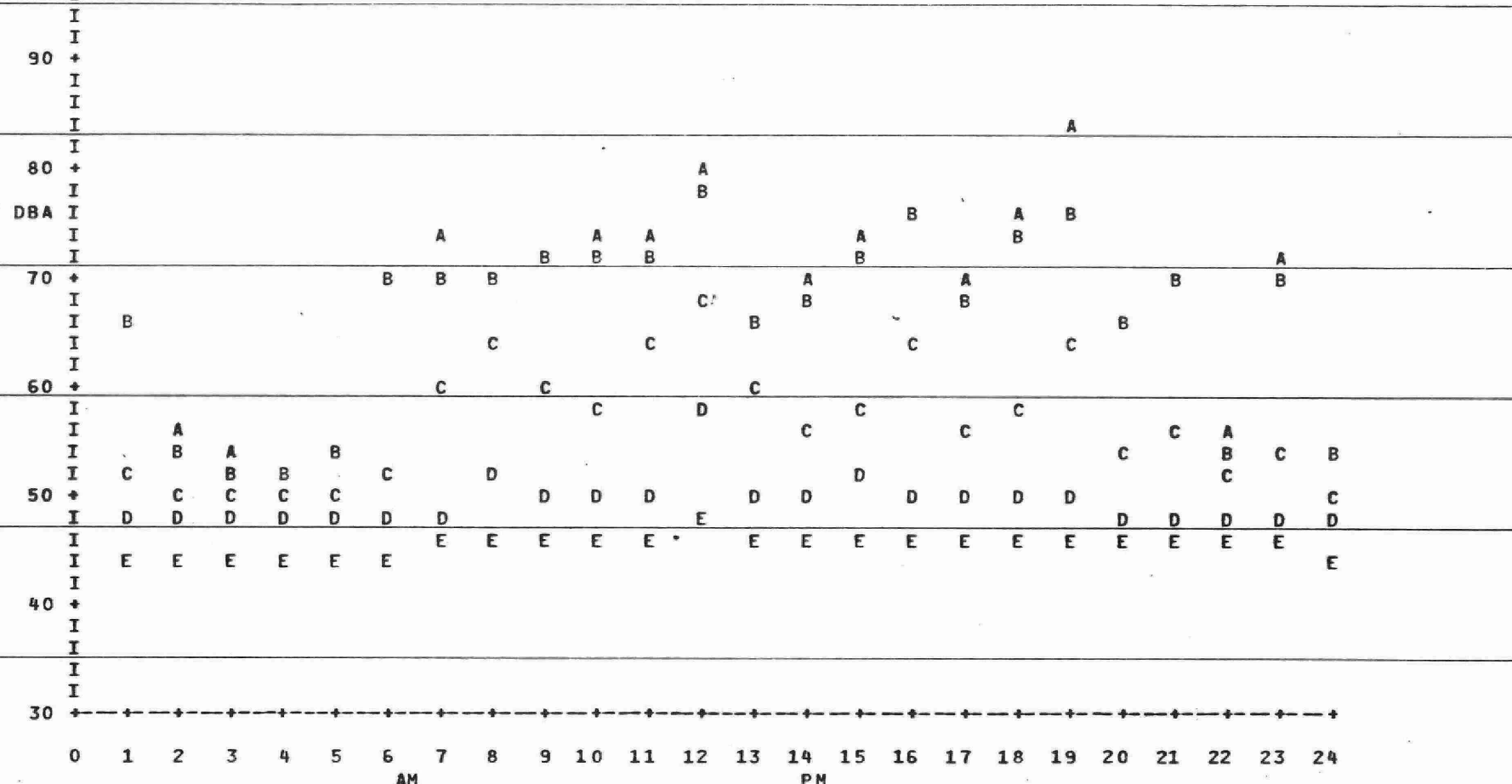
TNI

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SIGMA

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110 +	11p.m.-7a.m.	65	51	47	44	41.5	51.7	3.6	60.9
I	7a.m.-7p.m.	71	61	50	45	78.5	59.1	6.3	75.3
I	7p.m.-11p.m.	65	53	48	45	46.5	53.1	4.2	63.8
I	24 hour	69	57	48	45	62.5	56.9	5.5	71.1



HOUR OF DAY

180

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 27T64

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A WEIGHTED DECIBEL LEVEL

Community Description: site 27, residential; older residential area with single family homes and renovated apartments; Earl Street, a through local street, 100' to South; Queen's University campus near by.

A relatively quiet site, local traffic sounds and residential activities are the major intrusions. The monitor was located on a hydro pole 15' above Albert Street.

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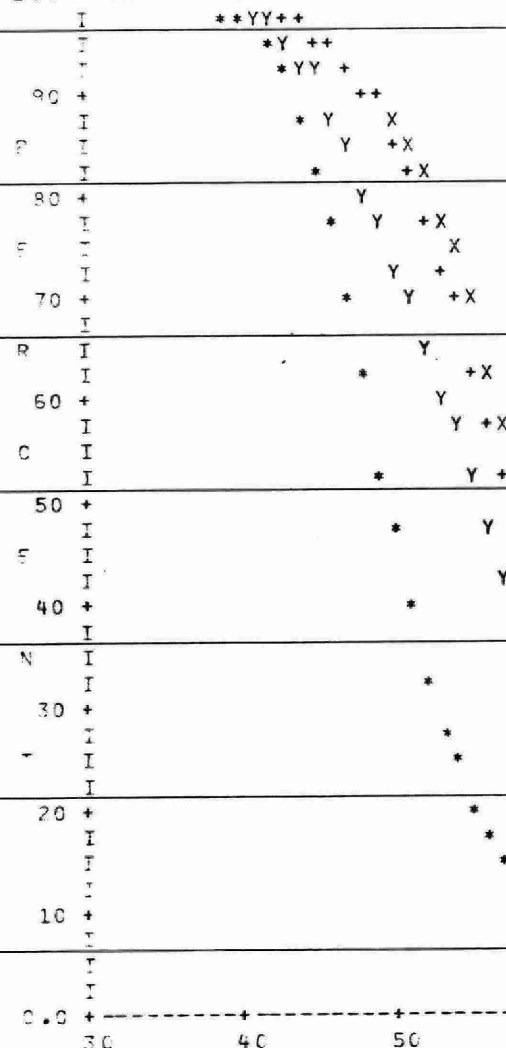
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
AM PM

HOUR OF DAY

PERCENTAGE TIME DSA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 31FG3

100 +YYYYYYYYYY+



Community Description: site 31, institutional; Queen's University Campus; Union Street, a busy street, 50' to North; surrounded by university property and buildings.

A relatively quiet site intruded by local traffic and people sounds. The monitor was located on a hydro pole 15' above University Avenue, a local thoroughfare leading directly into the university area.

A WEIGHTED DECIBEL LEVEL

24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 21A93

PERIOD L₁ L₁₀ L₅₀ L₉₀ TNI L_{EQ} SIGMA NPL

110 +	A	11p.m.-7a.m.	69	58	48	42	75.5	57.0	6.7	74.1
I		7a.m.-7p.m.	75	66	54	45	98.5		8.1	
I		7p.m.-11p.m.	73	64	54	45	90.5	60.8	7.4	79.7
I		24 hour	74	64	52	44	93.5		8.0	

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AM PM

HOUR OF DAY

HOUR OF DAY

DATE AND LOCATION CODE 31UG3

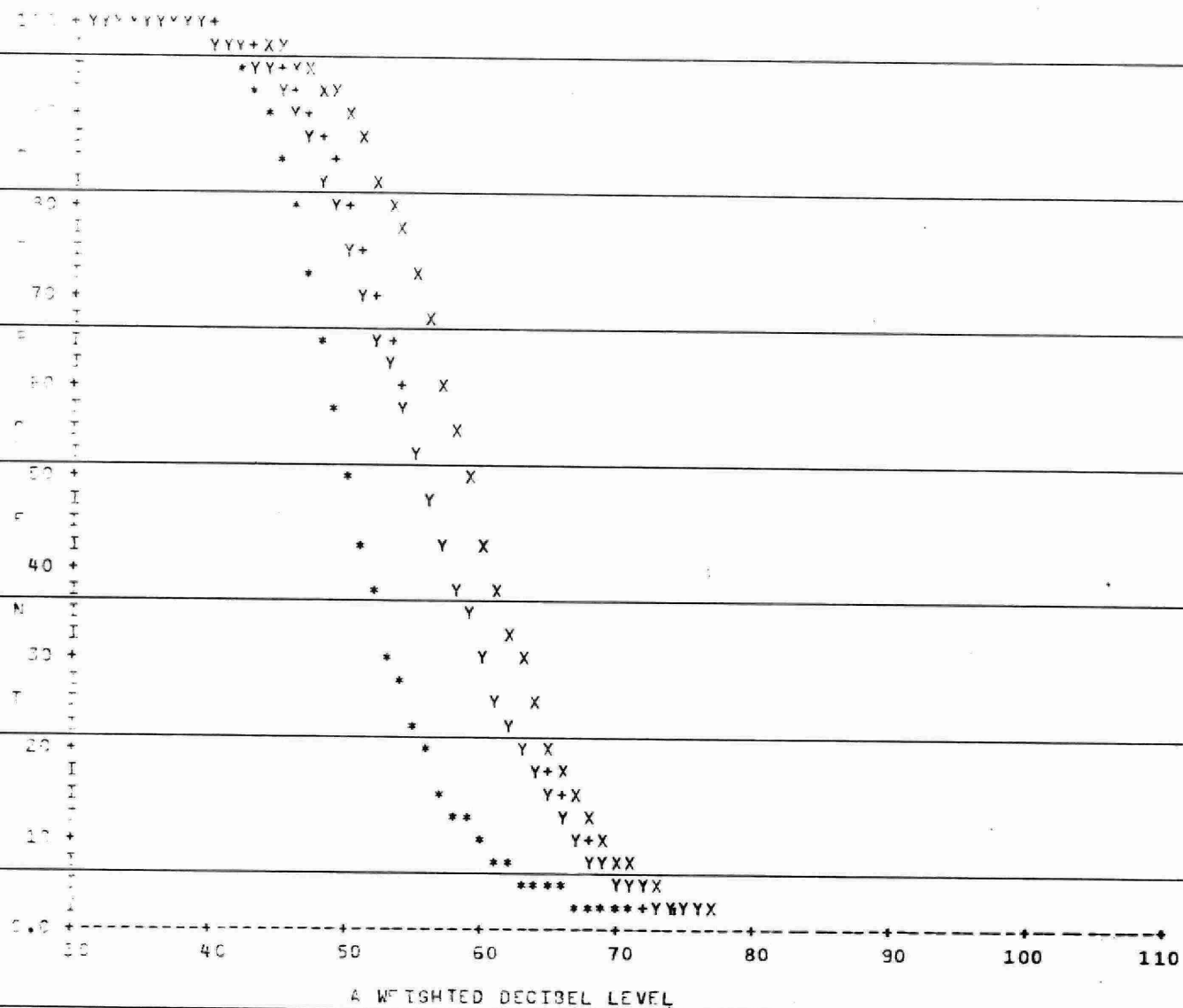
$$* Y Y + X$$

A WEIGHTED DECIBEL LEVEL

[illegible]

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 31403



PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 32FG4

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A WEIGHTED DECIBEL LEVEL

Community Description: site 32, residential industrial; older single family homes adjacent to industrial plant; Montreal Street, a busy street, 50' to East; city park 400' to North-East.

The sound environment is dominated by vehicular traffic with people sounds, industrial noise and residential activities the major intrusions. The monitor was located on a hydro pole 15' above James Street, a local street.

DATE AND LOCATION CODE 32AG4

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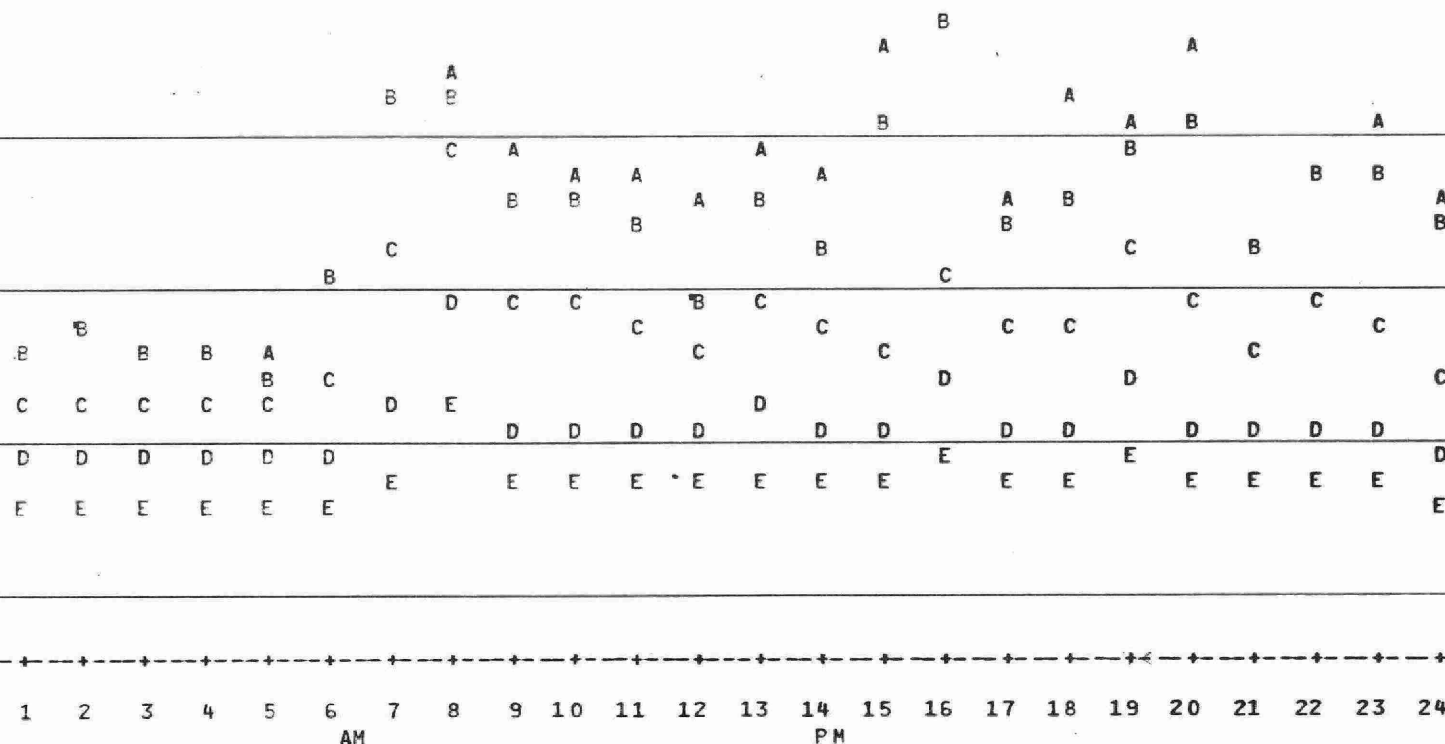
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α	Ratio of max to min value of $f(x)$
30	1.0
40	1.0
50	1.0
60	1.0
70	1.0
80	1.0
90	1.0
100	1.0
110	1.0

A WEIGHTED DECIBEL LEVEL

PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	63	51	46	42	47.5	52.0	4.5	63.5
7a.m.-7p.m.	70	58	49	44	69.5	57.8	6.2	73.7
7p.m.-11p.m.	66	56	47	43	64.5	54.6	5.4	68.5
24 hour	68	56	47	43	64.5	56.0	5.8	71.0

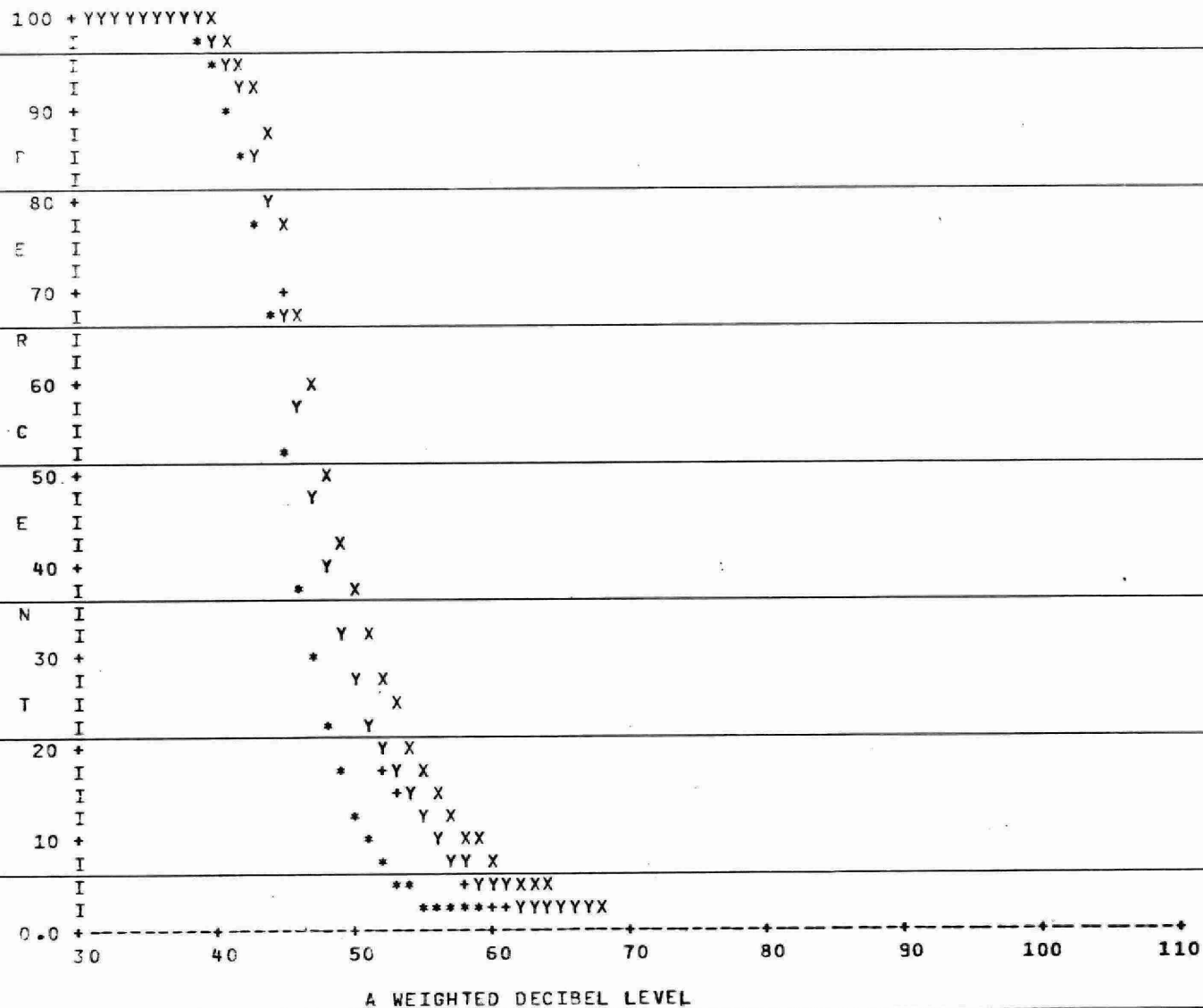
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AM PM



HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 32UG4



24 HOUR NOISE CLIMATE

DATE AND LOCATION CODE 32MG4

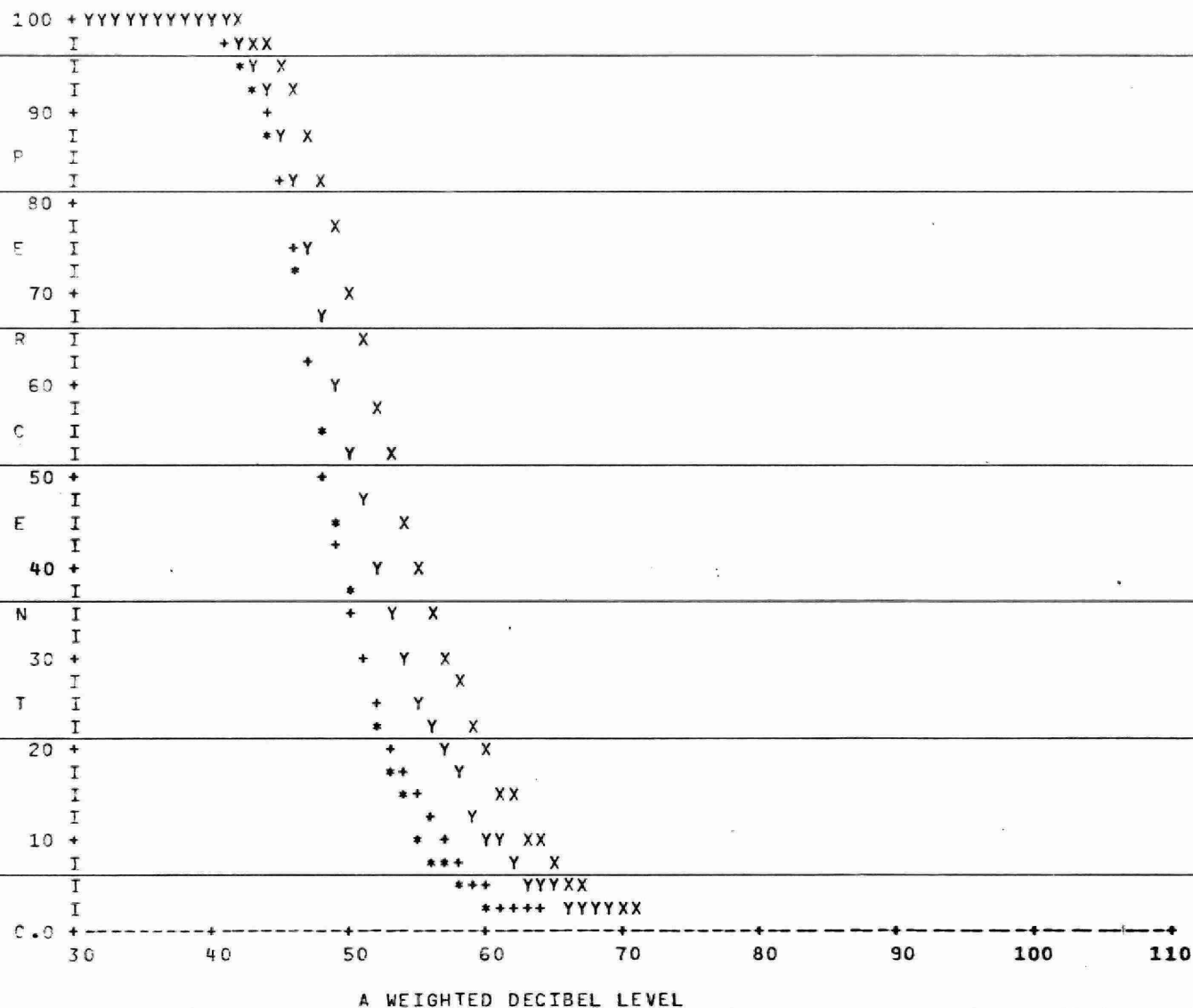
PERIOD	L ₁	L ₁₀	L ₅₀	L ₉₀	TNI	L _{EQ}	SIGMA	NPL
11p.m.-7a.m.	63	56	49	44	61.5	52.9	4.7	65.1
7a.m.-7p.m.	73	64	54	47	84.5	61.8	6.7	79.0
7p.m.-11p.m.	66	57	49	45	62.5	54.8	5.2	68.1
24 hour	70	61	51	45	78.5	59.4	6.4	75.8

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HOUR OF DAY

PERCENTAGE TIME DBA LEVEL EQUALLED OR EXCEEDED

DATE AND LOCATION CODE 32MG4





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